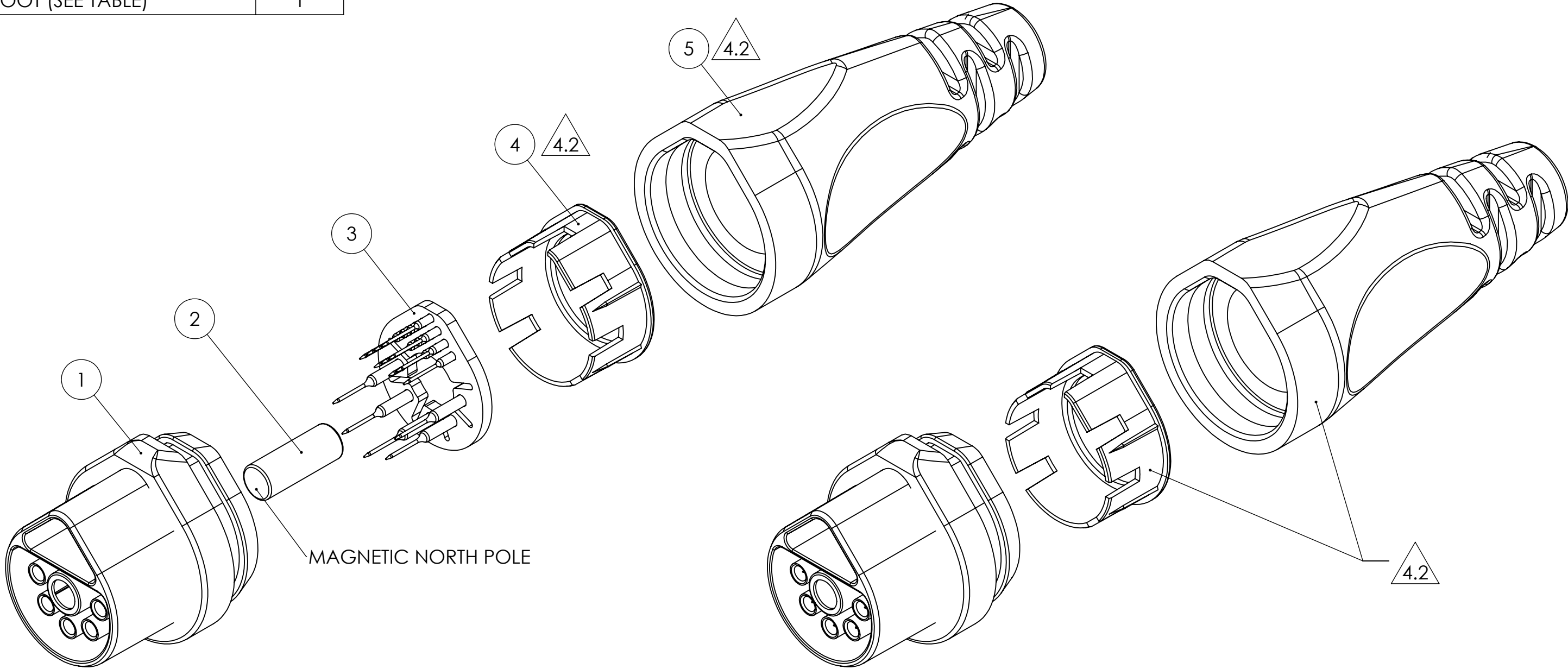
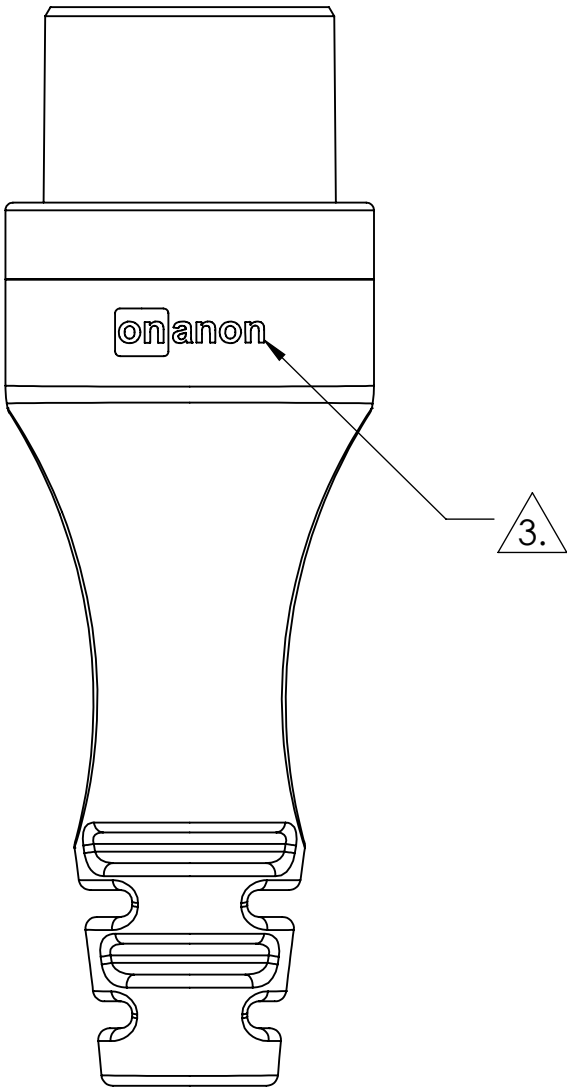


ITEM NO.		PART NUMBER	DESCRIPTION	QTY.
1		282-PT001-XX	PLUG HOUSING (SEE TABLE)	1
2		D38-N52 (OR EQ)	N52, MAGNET 3/16" X 1/2"	1
3		282-A004-XXXX	PLUG INSULATOR ASSEMBLY (SEE TABLE)	1
	3.1	INSULATOR	MC-HV PLUG INSULATOR	1
	3.2	0797-X	LV MALE PIN (SEE TABLE)	XX
	3.3	0798-X	HV MALE PIN (SEE TABLE)	X
4		264-PT016	INSULATOR RETENTION CAP - GENERATOR PLUG	1
5		282-PT003-XXXX	PLUG SLIP FIT BOOT (SEE TABLE)	1

REV.	DESCRIPTION OF CHANGES	REL. BY	ECO#	REL. DATE
01	INITIAL RELEASE	ER	7280	4/8/2025



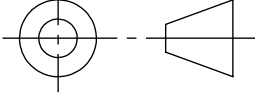
NOTES (UNLESS OTHERWISE SPECIFIED)

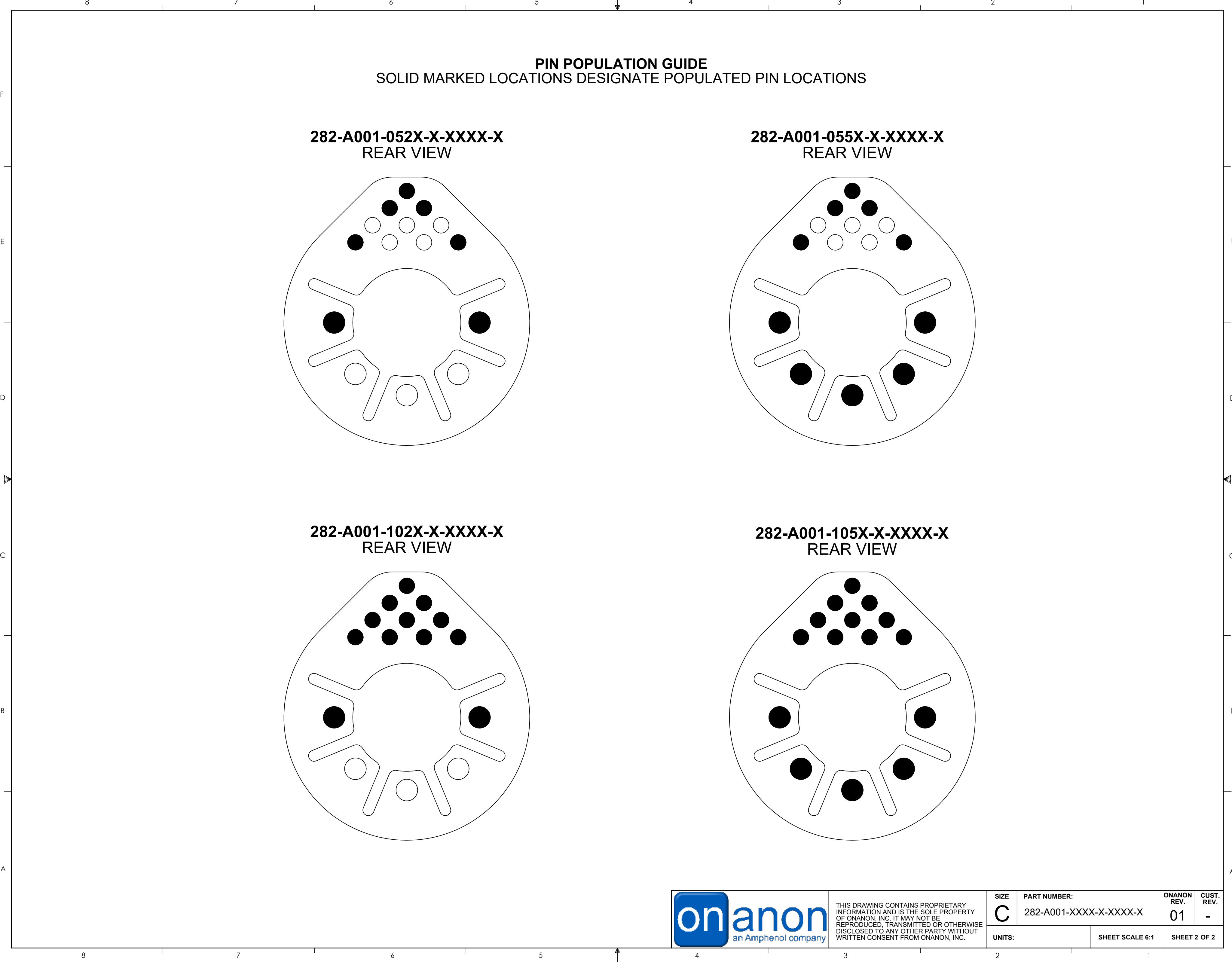
- SHALL COMPLY WITH THE RESTRICTIONS OF THE USE OF HAZARDOUS SUBSTANCES (ROHS) SET FORTH IN EU DIRECTIVES 2011/65/EU AND 2015/863/EU.
 - SHALL COMPLY WITH REGISTRATION EVALUATION AUTHORIZATION RESTRICTIONS OF CHEMICALS (REACH) SET FORTH IN EU DIRECTIVE 1907/2006/EU.
 - LASER MARK ONANON LOGO. PROGRAM "282-PT003-XXXX ONANON LOGO".
 - PACKAGING:
4.1 ITEMS ①, ②, ③ TO BE ASSEMBLED TOGETHER.
4.2 ITEMS ④ AND ⑤ TO BE LEFT UNASSEMBLED AND PACKAGED WITH ITEMS ①, ②, AND ③.
4.3 PROVIDE ADEQUATE PACKAGING TO PREVENT DAMAGE DURING SHIPPING AND HANDLING.
- LABEL EACH PACKAGE WITH THE FOLLOWING INFORMATION:
5.1 PART NUMBER
5.2 PURCHASE ORDER NUMBER
5.3 MANUFACTURING DATE AND LOT NUMBER
5.4 QUANTITY PER PACKAGE
 - CERTIFICATIONS OF CONFORMANCE:
6.1 MATERIAL CERTIFICATION
6.2 CERTIFICATION OF CONFORMANCE (TO INCLUDE PART#, LOT#, MANUFACTURING DATE, AND MATERIAL LOT#)

PART NUMBER CONVENTION

282-A001-XXXX-X-XXXX-X		
NO. OF LV CONTACTS 05, 10	PLUG COLOR SEE COLOR CODES	COLOR CODES B - BLACK G - GREY R - RED Y - YELLOW N - GREEN W - WHITE U - BLUE
NO. OF HV CONTACTS 2, 5	BOOT ID 270 - $\varnothing$ 0.270	
CONTACT TYPE S - SOLDER CUP R - ROBOSOLDER®	BOOT COLOR SEE COLOR CODES	
	INDICATOR COLOR SEE COLOR CODES	

CONTACT SALES@ONANON.COM FOR CUSTOM CONFIGURATIONS.

THIRD ANGLE PROJECTION  UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES [MM] STANDARD TOLERANCES .XX .XXX .XXXX ANGLE DIAMETER ±.010 ±.005 ±.002 ±2° ±.002 SURFACE FINISH: (UNLESS OTHERWISE SPECIFIED) N/A		THIS DRAWING CONTAINS PROPRIETARY INFORMATION AND IS THE SOLE PROPERTY OF ONANON, INC. IT MAY NOT BE REPRODUCED, TRANSMITTED OR OTHERWISE DISCLOSED TO ANY OTHER PARTY WITHOUT WRITTEN CONSENT FROM ONANON, INC.		 720 SOUTH MILPITAS BLVD. MILPITAS, CA 95035 PHONE: (408) 262-8990 FAX: (408) 262-2901 WWW.ONANON.COM	
DRAWN BY: E. RUCK CHECKED BY: W. CONNER APPROVED BY: K. KESHTGAR		DATE: 4/8/2025 DATE: 4/8/2025 DATE: 4/8/2025		DRAWING TITLE: MAGCONNECT® HIGH VOLTAGE PLUG ASSEMBLY	
SIZE C		PART NUMBER: 282-A001-XXXX-X-XXXX-X		ONANON REV. 01	CUST. REV. -
REFERENCE		SHEET SCALE 2:1		SHEET 1 OF 2	



PIN POPULATION GUIDE
SOLID MARKED LOCATIONS DESIGNATE POPULATED PIN LOCATIONS

282-A001-052X-X-XXXX-X
REAR VIEW

282-A001-055X-X-XXXX-X
REAR VIEW

282-A001-102X-X-XXXX-X
REAR VIEW

282-A001-105X-X-XXXX-X
REAR VIEW

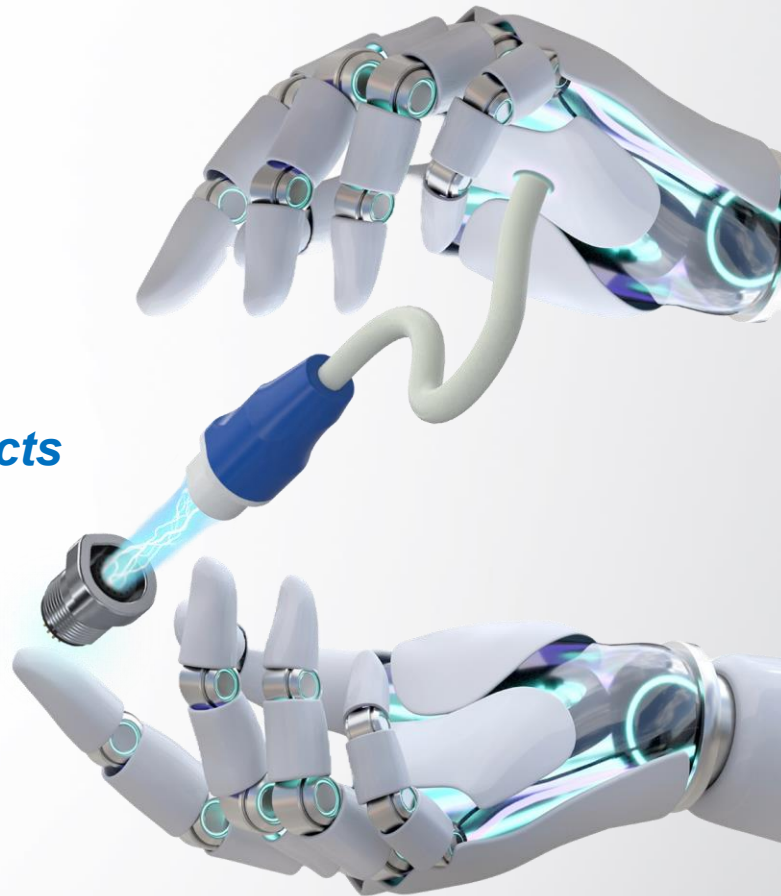


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SIZE C	PART NUMBER: 282-A001-XXXX-X-XXXX-X	ONANON REV. 01	CUST. REV. -
UNITS:		SHEET SCALE 6:1	SHEET 2 OF 2



2026 Edition
Product Catalog
Application Specific Interconnects
Medical · Industrial · Aerospace





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Automated Manufacturing	4
Overmolding and Encapsulation	5-6
Engineering and Design	7-8
Standard Connectors	A 1-3
RoboSolder®	B 1
MagConnect®	C 1-2
SmartConnect®	C 3-4
BoardConnect®	C 5-6
CableConect®	C 7-8
CustomConect®	C 9-10
Ball & Land Grid Array Socket Systems	D 1-2
Interconnect Pins	E 1-34
Socket Pins	E 2-9
Male Printed Circuit Pins	E 10-26
Bladed Pins	E 27-30
Clip Contacts	E 31-34
Materials	F 1-2



ABOUT US

Milpitas, California

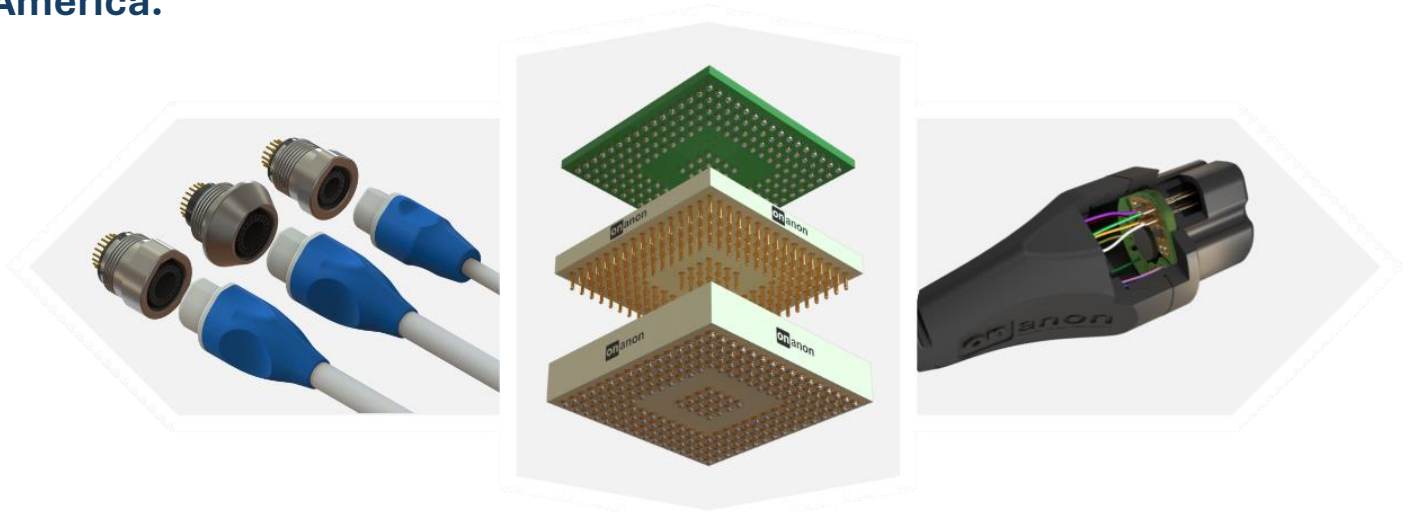


Onanon is a leading connector and cable assembly manufacturer headquartered in Milpitas, California, specializing in custom interconnect solutions for medical, automotive, and industrial applications. With a second production facility in Hermosillo, Mexico, we deliver high-quality, scalable manufacturing to meet global demand.

Hermosillo, Mexico



Onanon, Inc. is an engineering and manufacturing company capable of producing over 10 million connector components a day, making us one of the largest connector manufacturers in North America.



Established in 1979, Onanon has a tradition of zero defects, on-time delivery and cost competitiveness. Our fully automated Milpitas, California manufacturing facility houses Engineering through Manufacturing.

Onanon is particularly distinguished by our proprietary high speed automated machining and assembly processes. This method of manufacturing gives us the flexibility to easily and quickly reconfigure to make any size/shape connector with little to no tooling cost.

Our product line features advanced connector solutions like MagConnect® and SmartConnect® designed for medical and industrial applications. We also provide BoardConnect®, focusing on board-to-board, BGA sockets, spring-loaded sockets, pin headers, and a wide range of other application specific interconnect solutions.

Onanon products are found in these diverse markets:

- Medical Cables
- Medical Equipment
- Networking Systems
- Power Supplies
- Scanners
- Test Equipment
- Telecommunications
- AC/DC Converters
- Automotive
- Backplanes
- Broadcasting Equipment
- Computers
- Connectors
- Fiber Optics
- Instrumentation

Quality in Production

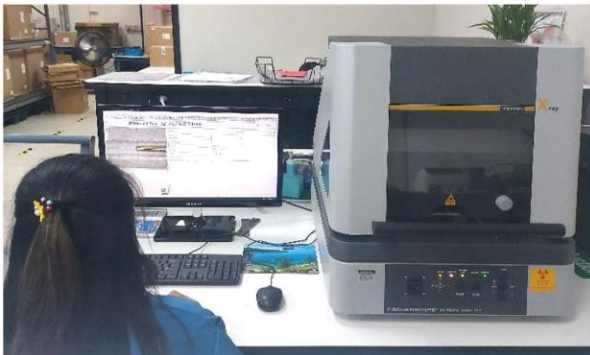


Based on the principles of continuous improvement and the commitment to meet the requirement of ISO 13485, Onanon will meet customer requirements the first time, every time.

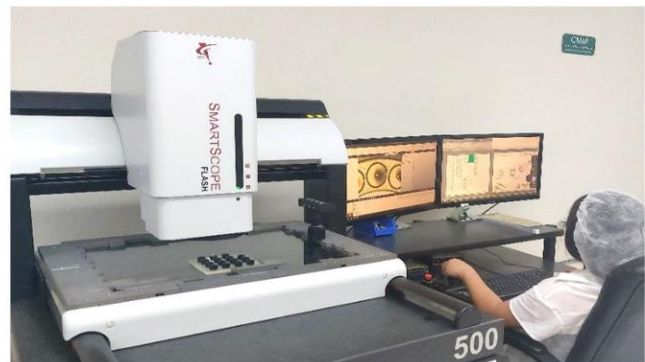


Certified

X-Ray Fluorescence Measurement



Touch Probe Measurement



Custom Packaging



Part Cleanliness Tester



Automated Manufacturing & Machining

Growth oriented companies have found employing Onanon to source, fabricate and inventory product to be the fastest, most cost-effective way to bring products to the market.



Pin Loading

Onanon is a skilled team of knowledgeable engineers, product managers and trained technicians that continuously seek ways to lower final product cost while raising quality.



Surface Mount Technology (SMT) Assembly

Expertly Engineered End-to-End Solutions



Overmolding

Vertically Driven In-House Capabilities



CNC Machining

Using fully automated manufacturing equipment, Onanon has been writing protocols and developing procedures to match the specifications of the most demanding customers worldwide since 1979.

Overmolding & Electronic Encapsulation

Variations

Low Pressure Overmolding

Overmolding is a low pressure/low temperature injection molding process used for encapsulating and protecting delicate electronic components with a thermoplastic material.



Multistep Overmolding

Two-step Overmolding uses low-pressure molding as the 1st encapsulation step to protect the delicate electronics and a 2nd shot using regular engineering thermoplastics.



Epoxy Overmolding

Epoxy Overmolding enhances the resilience of electronic components, making them more resistant to environmental factors and extending their lifespan. Additionally, epoxy materials offer good thermal conductivity, aiding in heat dissipation and overall performance.



Prototyping

DFM

Efficiently and cost-effectively produced with minimal complexity and maximum functionality.

Rapid/Quick Test Tools

3D printing, CNC machining, & other technologies that provide fast and cost-effective ways to create physical prototypes for evaluation and validation.

Material Selection

We choose the best materials for intended application, performance requirements, and environmental conditions.

Production Tools

Designed to shape, assemble, or otherwise process materials to create finished products efficiently.

Contract Manufacturing

Low-to-high volume production

Value added services: engraving / color

Turnkey & supply management.



Why Choose Us?

Cost Effective

Overmolding is more cost-effective than traditional potting methods.

Specifications Reduction

Reduces the weight and space of finished components.

Ingress Protection & Ruggedization

Encapsulation can make electronics waterproof up to IPX8 and protect them from impacts, strains, and vibrations.

Sterilization

Ensures safety, regulatory compliance, and the prevention of microbial contamination.

Resistance to Harsh Chemicals

Withstand exposure to aggressive or corrosive chemical substances without undergoing degradation, damage, or loss of functionality.

Environmentally Friendly & Safe

Utilizes eco-friendly materials, including recyclable thermoplastics, which align with sustainable manufacturing practices.



Markets

Medical

Defense

Aerospace

Automotive

Industrial

Commercial



Onanon's engineering is here to help.

Our goal is to work closely with the customer to efficiently develop products together that are both high quality, cost effective and designed for manufacturing.

Once we understand the application, we can incorporate processes that we have developed in the manufacturing of millions of connectors.

DESIGN FOR MANUFACTURING

We understand that engineering is a continuous innovation to build a better product. Rapid prototyping is as important as volume production. Nothing beats having a prototype in your hands in days rather than months. It not only helps with “buy in” at the customer, but it also shapes our process for volume production. Our rapid robotic milling allows one or many to flow to you by scheduled delivery for just-in-time production.

COMPLIANT PIN TECHNOLOGY

Onanon's Compliant Pin Technology enables the integration of PCBAs directly onto connector substrates, allowing for terminal connections and the addition of components like resistors, op-amps, and microprocessors. This creates a flexible, application-specific solution that can serve the needs of multiple devices. By embedding components at the board level, Onanon simplifies design while enhancing performance, offering custom solutions with faster turnaround and lower overall cost.

RAPID WIRE TERMINATION TECHNOLOGY

Our solder ball rapid wire termination technology not only insures well-fit quick connections, but it also insures connections with low inductance, capacitance and resistance.

HIGH QUALITY/COST EFFECTIVE

We understand that modern electronics requires high tolerance, strong, light, rugged connectors that are often required to pass wide band signals without distortion. This is what we make.

From Concept to Connector or Cable Assembly

At Onanon, every solution begins with a deep understanding of your application. Our design process starts by identifying your exact requirements, led by engineers who understand how connectors perform in real-world environments and ends with a solution to your needs.

After You Submit an RFQ

Our engineers take these next steps

1. Product Design

Engineers learn the needs of our customer and design a solution. We communicate with our customer through this whole process.



2. Prototyping

With our in house manufacturing we create a prototype and work with our customers to ensure it meets all their requirements.



3. Tooling

Take proven out designs and create tooling for production level plastics.



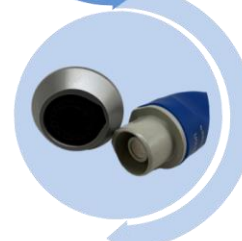
4. Qualification

Our engineers conduct rigorous testing and collaborate with you through validation to ensure the final solution once again meets all performance and reliability requirements.



5. Production

After qualification, we transition your project into production with a focus on quality, consistency, and on-time delivery.





MagConnect® | Rho - Magnetic

- Magnetic latching connector with elliptical keying
- Populates **up to 16 pins**; 3A current; 1kVAC & 1.5kVAC operating voltage; 2 lbf Min
- Designed for modular reusable and disposable systems
- Circuitry with components are easily added via PCBA platform
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



MagConnect® | Echo - Magnetic

- Compact magnetic latching connector for high-cycle use
- Populates **up to 20 pins**; 3A current; 1kVAC & 1.5kVDC operating voltage; 3.5 lbf Min
- Designed for surgical, diagnostic, and therapeutic disposable devices
- Circuitry with components are easily added to this connector
- Panel mount or in-line cable configurations; reusable and disposable options with ETO, Gamma, and autoclave safe materials
- Female pins located on panel mount receptacle



MagConnect® | Hero - Magnetic

- Self-mating magnetic latching connector for critical care systems
- Populates **2–20 pins**; 3A current; 1kVAC and 1.5kVDC operating voltage; 3.5 lbf Min
- Used in reusable high-performance medical environments
- Supports EEPROMs, resistors, and capacitors
- Built with chemical-resistant materials; ETO, Gamma, and autoclave safe
- Female pins located on plug



MagConnect® | High Voltage - Magnetic

- Magnetic latching connector for high-voltage, rugged environments
- Hybrid **11-pin system**: 5 HV (4.5kV) and 6 LV (2kVDC); 3.3 lbf Min
- Ideal for surgical, diagnostic, aerospace, and industrial tools
- Supports circuit integration with intelligent electronics
- Panel mount or in-line cable formats; reusable and disposable with ETO, Gamma, and autoclave safe materials



FiberPlus™

- Self-mating, magnetic latching connector used in medical applications
- Hybrid system with up to **8 electrical contacts** and **2 fiber optic connections**
- Option to incorporate circuitry with components into connector
- Designed using chemical-resistant materials; EtO and autoclave safe



MedLock® | Ultra - High Density

- Ultra high-density connector for large power and bandwidth needs
- Populates **up to 146 pins**; rated to 5 amps & 10Ghrz
- Suitable for a wide range of medical device applications
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials





Medlock® | HD - High Density

- Snap latch connector with elliptical keying for surgical tools
- Populates **up to 62 pins**; rated to 3A; 600 VDC & 500 VAC operating voltage
- Designed for surgical and high-density medical applications
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



Apollo® - Latching

- Compact snap latch connector with elliptical keying
- Populates **up to 34 pins**; rated to 5 amps & 10Ghrz
- Ideal for surgical and reusable medical devices
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



Pluto® - Friction Fit

- Small footprint push-pull connector with elliptical keying
- Populates **up to 14 pins**; rated at 5 amps & 10Ghrz
- Suited for compact medical tools and portable devices
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



Neutrino® - Friction Fit

- Microscale push-pull connector for limited-space applications
- Populates **up to 10 pins**; rated to 3A; 600MΩ @ 800 VDC & 10MΩ @ 400 VAC operating voltage
- Perfect for compact and lightweight medical systems
- Circuitry with components are easily added to this connector
- Reusable and disposable options with ETO, Gamma, and autoclave safe materials



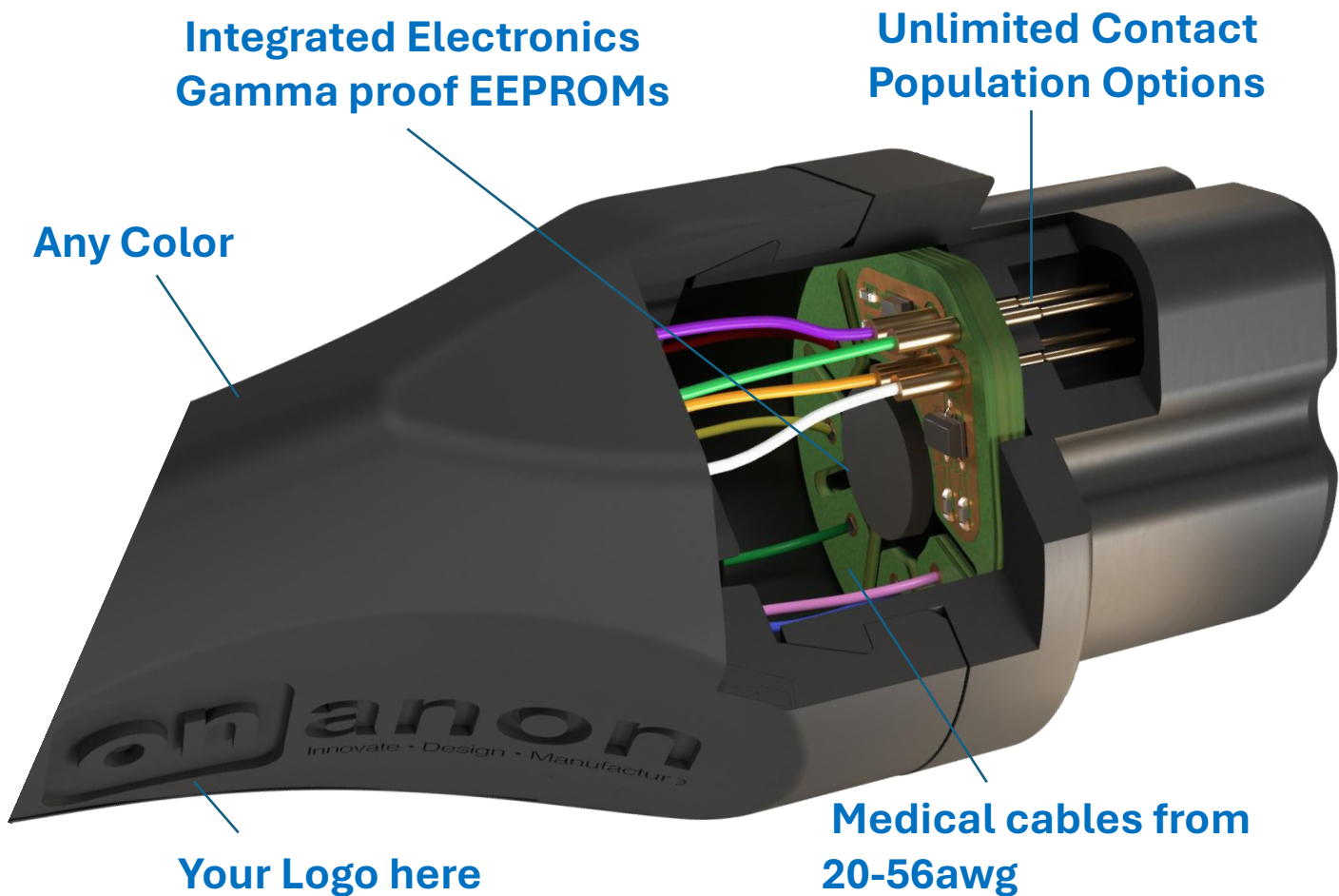
Redi-Mate™ | 1M Series

- Rugged metal push-pull connector for reusable applications
- Pin count customizable; compatible with circular industry connectors
- Ideal for surgical tools, neuromodulation, and diagnostics
- Secure locking mechanism for reliable connectivity
- Built from sterilizable, durable materials for hospital-grade use



Redi-Mate™ | 1P Series

- Lightweight plastic push-pull connector for cost-effective applications
- Pin count customizable; built for single-use or semi-disposable designs
- Ideal for imaging, handheld clinical tools, and electrophysiology
- Secure locking mechanism for reliable connectivity
- Compatible with standard connectors and sterilization protocols



Our decades of success stories for OEM's allows those who break free from the "wimpy" to prosper with our lower costs solutions. Solutions that are scalable to the OEM's growing electronic device demands. Getting their product to market faster, all with the added benefits of increasing the end users experience. Our turnkey solutions puts OEM's lightyears ahead of their competition.

We understand not all OEM's like to lead their industry, and are happy with the expensive "wimpy" but the market leaders, come to Onanon for their muscles!

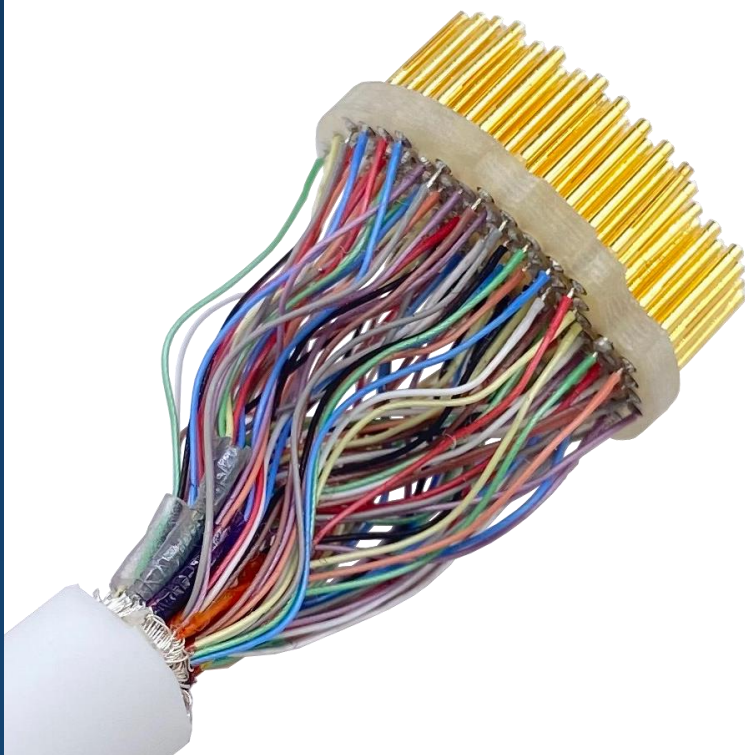
Onanon invented and patented RoboSolder® technology

Robotically terminates down to 56awg fine wires to IPC Class III

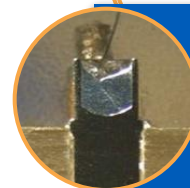
Onanon is the industry leader in terminating wire and cables



"Removing the human variable"



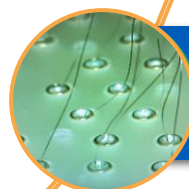
Solder and Heating Process 100% automated



Accurate and repeatable IPC Class III Standards



Programmable to configure around different pinouts



Terminate 20 to 56 AWG Wires

What makes MagConnect® unique?



Onanon's MagConnect® is the most intuitive interconnect in the world with magnetic, self-mating features. It's popular in the medical industry, making the lives of physicians easier and safer to prevent accidents during various medical procedures.

Across medical, industrial, and military spaces, MagConnect® is incredibly easy to use, due to its simple elliptical shape and its ability to magnetically plug itself in. Unlike many basic connectors which can be awkward and cumbersome to plug in, MagConnect® does not require precise key alignment or any force to connect. Simply get the connector close enough and it will plug itself in.

Industries Served

Medical Equipment

MagConnect® is popular in the medical industry and is often used with surgical equipment in situations where intuitive quick connection and quick disconnection must occur. The retention force can be modified to ensure patient safety across a variety of procedures.

Common Use Cases

- Bronchoscopy
- Ultrasound Devices
- RF Ablation Procedures
- Electrosurgical



MagConnect®

Case Studies

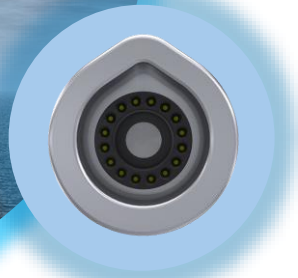
“FDA preferred a magnetic safety latch versus a locking connector” – Director of Engineering at Medical Device OEM

Military Equipment

MagConnect® is popular in the military space, due to its reliability and dependability. It is frequently used in a variety of wearable applications.

Common Use Cases

Wearable Intelligence Equipment
Communications Equipment
Missile Launch Applications

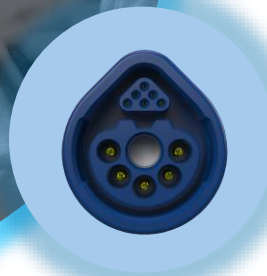


Industrial Equipment

MagConnect® is often found in a variety of other industrial applications. It is the perfect solution for field technicians when using equipment with hard-to-reach areas.

Common Use Cases

Power Transmission
Autonomous Mobile Robots
Automation Equipment
E-Bikes & E-Scooters



High Voltage Intravascular Lithotripsy

Magconnect® was also the perfect solution for high voltage Intravascular Lithotripsy for Vascular Calcium. The OEM commented that once Magconnect® was seamlessly integrated into their device that it was predictably safe, distinctively intuitive, and consistently effective.

Laryngoscope

Onanon was approached by a top medical video laryngoscope manufacturer in need of a creative solution for its laryngoscope connectors. Previously, they had been using HDMI connectors for this equipment, HDMI's inability to plug and unplug with ease were causing injuries to patients during procedures..

What makes SmartConnect® unique?

Onanon's SmartConnect® is an application specific interconnect allowing for digital scalability at the connector and cable level. SmartConnect® utilizes a PCBA within the connector, with electronic components, allowing for one connector to differentiate between multiple different devices.

SmartConnect® allows for a clean and simple solution by having components such as EEPROM's microprocessors, resistors, and capacitors integrated directly into the connector. Customers who cannot easily find a solution for their specific application partner with Onanon as an extension of their own team to design and build a custom SmartConnect® solution from scratch, at a fraction of the time and cost.

Industries Served

Medical Equipment

SmartConnect® is popular in the medical industry, often used in applications which require unique device identifiers, use-limiters, personality resistors, EEPROM's and other products using the same connector platform while performing multiple tasks.

Common Use Cases

Capacitance Clock Speed

Disposable Use Limiting

Diagnostic Data

Traceability



SmartConnect®

Case Studies

Onanon was approached by a top medical device OEM that sells over 100 variations of electrosurgical devices.

Military Equipment

SmartConnect® is used in a variety of military applications, often integrated into wearables to add intelligence within the interconnects.

Common Use Cases

Communication Devices
Field Failure Diagnostics
Wearables



Agricultural Equipment

SmartConnect® can be found in the agricultural industry in an assortment of smart electromechanical agricultural equipment.

Common Use Cases

IP Rated Cables for Tractor
Sprayers
Headers with Built-in
Capacitance
Wire Harnesses



After speaking with them and learning about their product requirements, we set out to design a SmartConnect® that would work with all of these product variations with one connector with built in electronics.

We created a universal SmartConnect® that had integrated device recognition. As soon as the device is plugged in, the equipment recognizes the device and immediately turns on all the correct settings. In addition to improving ease of use and convenience, this also eliminated any human error associated with altering settings on a device before a procedure.

What makes BoardConnect® unique?

Onanon's BoardConnect® represents Onanon's robust capabilities when it comes to designing customizable board to board connectors for a variety of applications.

BoardConnect® is not a one-size-fits-all solution, but a custom solution tailor-made for your application. It can be assembled as a board-to-board connector or as a cable assembly with a connector on it to connect it to a circuit board.

Scan here to
Build-a-Socket!



Industries Served

Medical Equipment

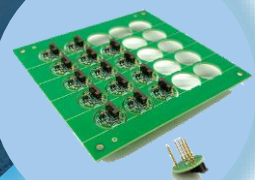
BoardConnect® is popular in the medical industry, often used for integrating off the shelf connectors into application specific assemblies.

Common Use Cases

Med Device Interconnect Adaptors

Next Gen Device Upgrades

Catheters



BoardConnect® Case Studies

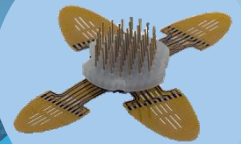
BoardConnect® can be designed for a variety of applications.

Military Equipment

BoardConnect® is often found in many applications in the military space, due to its reliability and dependability. It is frequently used in a variety of applications.

Common Use Cases

Board Connect with Flex
High Density

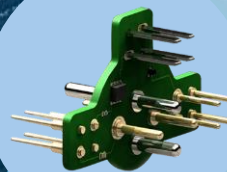


Agricultural Equipment

BoardConnect® is frequently found in the agricultural space, used in smart tractors and other intelligent harvesting equipment.

Common Use Cases

Right Angle PCB Connectors
Bladed Headers



One customer, a top military interconnect manufacturer, came to us in a dire situation which was costing their end customer over \$10,000 a day. They needed a custom board to board connector and provided us with a rough concept of what they needed.

Our engineering team was able to provide a drawing complete with tolerancing, DFM suggestions, and a cost competitive quote that same day. We manufactured their custom board solution and had it shipped within 4 days, a quick turnaround time when compared to the industry average of 4-6 weeks. In the process, we ended up saving them nearly \$100,000.

What makes CableConnect® unique?

Onanon's CableConnect® is another example of Onanon's creativity, ingenuity, and flexibility when it comes to designing custom cable assembly solutions for our customers. Decades of experience in the medical, industrial, military markets with fine wire (30-50 awg), high conductor count, micro-coax, high impedance, high voltage and silicone requirements together with a deep understanding of cable design engineering, have given us the ability to design cable assemblies that optimize function, performance, value, and appearance.

Industries Served

Medical Equipment

CableConnect® is frequently used in medical applications due to our ability to deliver exactly what you need in your cable assembly to meet your product requirements.

Common Use Cases

Autoclave Silicone Cables

Overmold OR Cables

Single Use Cables

Catheters



CableConnect®

Case Studies

A top medical robotics company needed a cable assembly that would fit into a very tight space within the cartridge of a disposable robotic arm.

Military Equipment

CableConnect® is a trusted tool of the military, and is frequently found in a variety of applications, such as custom self-mating and decoupling cables on wearable equipment.

Common Use Cases

Self-Mating Cables on Wearables

Self-Cleaning Interconnects



Agricultural Equipment

Onanon's CableConnect® has revolutionized the agriculture industry helping steward the industries evolution from mechanical to electromechanical and electrification, in the harsh environment that is the agricultural industry.

Common Use Cases

Intelligent Harvesters/Combines

Hi-tech Sprayer Systems

Wire Harnesses

Turf Equipment



Additionally, it needed to be hermetically sealed so that no gas, air, or other substances would leak in and compromise the integrity of the assembly. The sensor inside needed to be able to work under harsh conditions, including high temperatures, humidity, vibration, and exposure to chemicals.

This assembly would be used in robotic surgery equipment, so it was critical that it would be able to withstand these conditions. This medical robotics company was unable to find this specific solution anywhere else, so they approached Onanon to help design it from scratch.

What makes CustomConnect® unique?

Onanon's CustomConnect® represents Onanon's broad and flexible capabilities when it comes to producing custom interconnect solutions. CustomConnect® is not a one-size-fits-all solution, but a customizable interconnect made specifically for your application. Onanon's representatives will talk to you, figure out exactly what you need, take your specifications and product requirements, and bring them to life. Our vast expertise in electromechanical interconnect allows us to design interconnects that optimize function, value, and appearance.

Industries Served

Medical Equipment

CustomConnect® is used in a variety of applications in the medical market. Custom solutions are often needed when there are no readily available interconnects on the market that meet a customer's requirements.

Common Use Cases

- High Voltage Heart Catheters
- Electrosurgical Procedures
- Neuromodulation Devices
- Heart Pumps



CustomConnect®

Case Studies



The Problem

The existing design relied on non-value added manual gluing, crimping, taping, and overall poor design for manufacturability, adding cost, quality issues and reliability issues in the field. Surgeons were also experiencing fatigue during this time-consuming operation which requires precision and dexterity from the surgeon. The instruments were causing unneeded strain, discomfort and fatigue in the surgeon's hands. Surgeons had to use foot pedals in conjunction with the instruments to complete procedures. This led the OEM to approach Onanon for help to make their product and reliable at a disposable cost point.

Our Solution

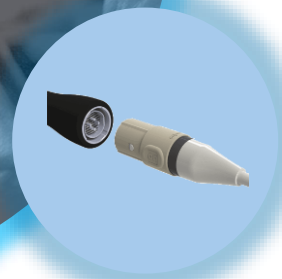
Onanon designed a CustomConnect® solution which removed all manual gluing, taping and crimping operations to name a few. The new design allowed it to be a plug and play device eliminating all scrap throughout the supply chain. Onanon redesigned the device to be more user friendly, improving the tactile feel, grip and button performance so that surgeons could more easily perform the operation without any of the strain, discomfort, or fatigue experienced previously. This also eliminated the need to use the additional foot pedal during procedures. All in all, Onanon's CustomConnect® solution led to a better product, which meant that surgeons were able to perform operations with more safety, efficiency and reliability.

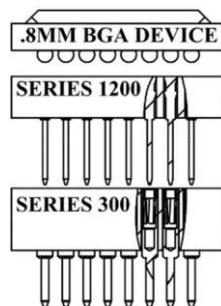
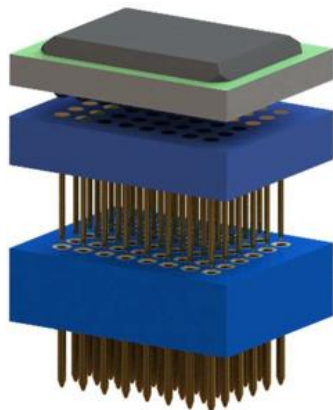
Industrial Equipment

Onanon can integrate proven electromechanical methodologies to create the perfect custom solution for industrial applications to match the rapidly changing needs of the fast-paced industry moving from mechanical to electromechanical.

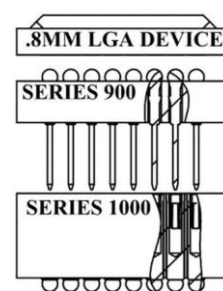
Common Use Cases

- Aerospace
- Agriculture
- Robotics
- Lidar





THRU HOLE



SURFACE MOUNT

PERFORMANCE AND MATERIALS SPECIFICATIONS

Thermal Performance [FR-4 Standard]:

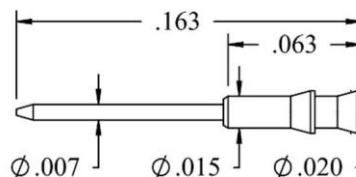
Operating Temperature Range:	-55° to 140°C
Glass Transition Temperature Range:	150° to 200°C
Resistance to Soldering Heat:	10 seconds @ 288°C
Flammability Rating [UL-94]:	UL94V-0
IEC Climatic Category:	55/125/21

Electrical Performance: Tests IAW MIL-STD-202 or 1344 Methods:

Maximum Voltage:	75 VAC / 100 VDC
Maximum Current:	1 Amperes per contact
Contact Resistance: Dry Circuit:	.01 Ω Max. @ .1 Amps/5 VDC
Insulation Resistance, @ 500 VDC	10,000 MegOhms Min.
Dielectric Withstanding Voltage	500 VAC Min.
Capacitance:	1 pf [PicoFarads] Max.
Self Inductance	2 nH [NanoHenries] Max.

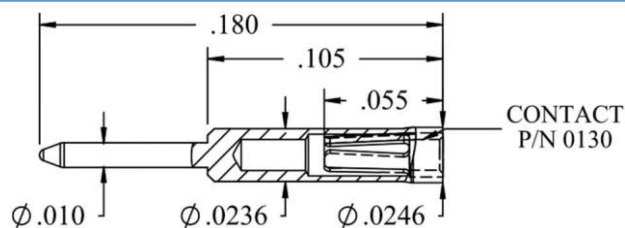
Contact Materials & Finishes [Other finishes available]:

Bodies:	Brass Alloy C36000 per ASTM-B16, ½ Hard
Plated	10 μ ln. Min. Gold over 100 μ ln. Min. Nickel, [or] 100 μ ln. Min. Tin Over 100 μ ln. Min. Nickel
Contacts:	Beryllium Copper Alloy C17200 per ASTM-B194 Plated
	10 μ ln. Min. Gold over 50 μ ln. Min. Nickel
Solder Balls:	Eutectic, Sn 96.5/Ag 3.0/Cu .5 Solder, ϕ .015 ~ ϕ .020
	Melting Temperature 218.5° C [425.3°F]

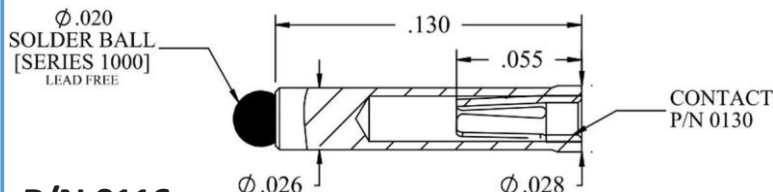


P/N 0108

ϕ .020 EUTECTIC
SOLDER BALL
[SERIES 900]
LEAD FREE



P/N 0114



P/N 0116

PART NUMBER: ORDERING INFORMATION

300

100

F - 0104

10A3

PRODUCT CODE

300 = Socket Pin Grid Array [PGA]
900 = LGA Interposer [BPGA]
1000 = Socket, Ball Grid Array [SBGA]
1200 = Ball Grid Array Interposer [PBGA]

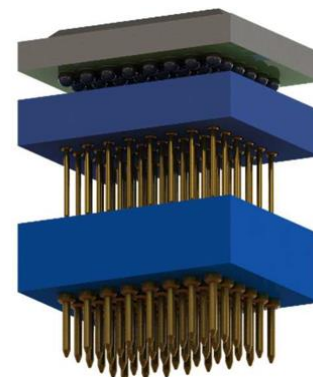
PIN COUNT

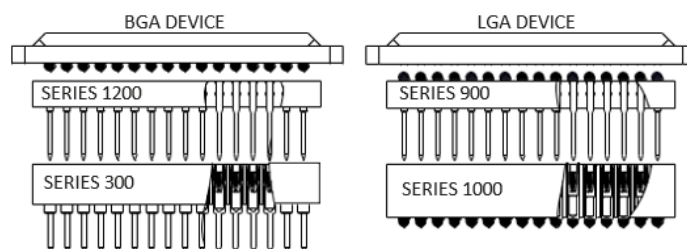
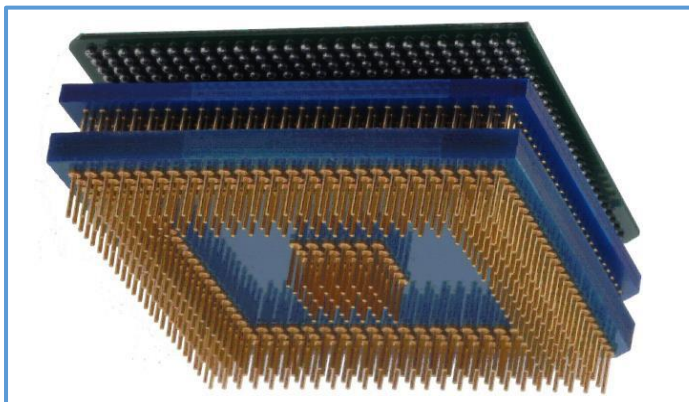
MATERIAL CONTACT P/N

A = ACRYLIC
E = PEEK [POLYETHERETHERKETONE]
H = POLYIMIDE, [MIL-L-13949/10]
F = FR-4, [IPC 4101/24]
R = RYTON [POLYPHENYLENE SULFIDE]
U = G.E. ULTEM [POLYETHERIMIDE]

PATTERN CODE

OVER 25,000
PATTERNS
AVAILABLE





THRU HOLE

SURFACE MOUNT

PERFORMANCE AND MATERIALS SPECIFICATIONS

Thermal Performance [FR-4 Standard]:

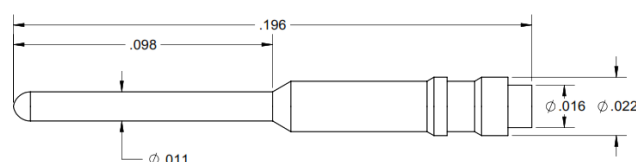
Operating Temperature Range:	-55° to 140°C
Glass Transition Temperature Range:	150° to 200°C
Resistance to Soldering Heat:	10 seconds @ 288°C
Flammability Rating [UL-94]:	UL94V-0
IEC Climatic Category:	55/125/21

Electrical Performance: Tests IAW MIL-STD-202 or 1344 Methods:

Maximum Voltage:	75 VAC / 100 VDC
Maximum Current:	1 Amperes per contact Contact
Resistance: Dry Circuit:	.01 Ω Max. @ .1 Amps/5 VDC
Insulation Resistance, @ 500 VDC	10,000 M Ω Min.
Dielectric Withstanding Voltage	500 VAC Min.
Capacitance:	1 pf [PicoFarads] Max.
Self Inductance	2 nH [NanoHenries] Max.

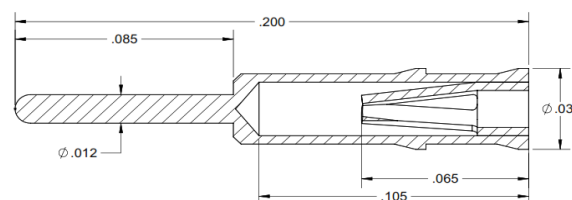
Contact Materials & Finishes [Other finishes available]:

Bodies:	Brass Alloy C36000 per ASTM-B16, ½ Hard Plated 10 μ ln. Min. Gold over 100 μ ln. Min. Nickel, [or] 100 μ ln. Min. Tin Over 100 μ ln. Min. Nickel
Contacts:	Beryllium Copper Alloy C17200 per ASTM-B194 Plated 10 μ ln. Min. Gold over 50 μ ln. Min. Nickel
Solder Balls:	Eutectic, Sn 96.5/Ag 3.0/Cu .5 Solder, ϕ .015 ~ ϕ .020 Melting Temperature 218.5° C [425.3°F]



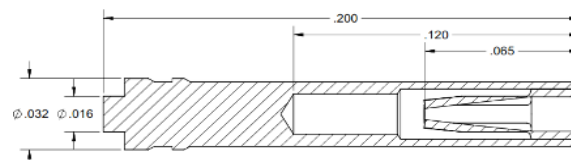
P/N 0556

ϕ 0.022" LEAD FREE
SOLDER BALL
(USED FOR SERIES 900)



P/N 0104

CONTACT PN: 0048
MATING PIN PN: 0556



P/N 0799

ϕ 0.032" LEAD FREE
SOLDER BALL



PART NUMBER: ORDERING INFORMATION



300
PRODUCT CODE



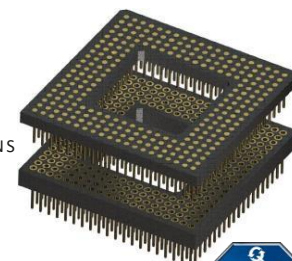
640
PIN COUNT

F
MATERIAL

0556 - 11A4
CONTACT P/N PATTERN CODE

OVER 25,000 PATTERNS
AVAILABLE

If unknown put XXXX
Factory will add pattern
code



300 = Socket Pin Grid Array [PGA]
900 = LGA Interposer [BPGA]
1000 = Socket, Ball Grid Array [SBGA]
1200 = Ball Grid Array Interposer [PBGA]

A = ACRYLIC
E = PEEK [POLYETHERETHERKETONE]
H = POLYIMIDE, [MIL-L-13949/10]
F = FR-4, [IPC 4101/24]
R = RYTON [POLYPHENYLENE SULFIDE]
U = G.E. ULTEM [POLYETHERIMIDE]

SOCKET PINS



Socket pins are single components that have inner BeCu clip that feature multi-finger contact and are fastened to PCB by being press-fit or solder mount. It is primarily used for plugging and unplugging of components on PCB and can accommodate round, square, or rectangular leads.

PRINTED CIRCUIT PINS



Printed Circuit Pins are fastened to PCB by being press-fit or solder mount. These pins are used for numerous plug-in applications and PCB to PCB interconnection.

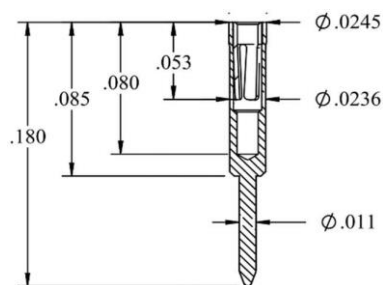
CONTACTS & CLIPS



Contacts, also called clips, are round multi-finger components with spring properties which are primarily used for plugging and unplugging of components on PCB. Clips are able to accept a broad range of mating pin diameters from 0.007" to 0.102" and maintain retentions after multiple insertions.

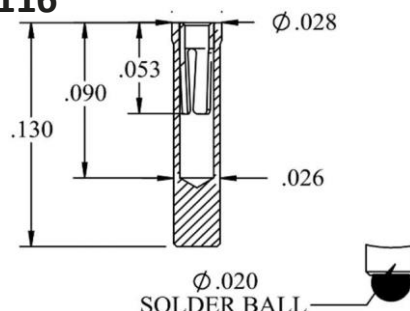
Socket Pins, Printed Circuit Pins, and Contacts are electronic interconnect devices for printed circuit boards. These pins are made of metallic elements or alloys. Socket Pins and Printed Circuit Pins are mainly machined of Brass Alloy C36000 per ASTM-B16 and has a finish of either Gold over Nickel or Tin over Nickel. Contacts are made of BeCu (Beryllium Copper) Alloy C17200 per ASTM-B194 and has a finish of either Gold over Nickel or Tin over Nickel.

0114



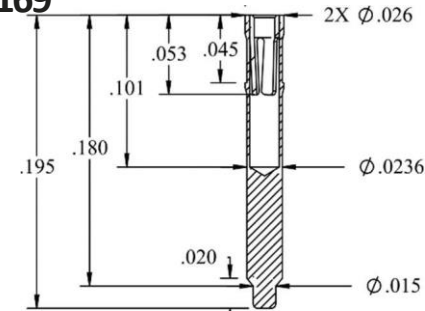
PLATING: Au/Ni CONTACT P/N: 0130
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.006 - Ø.011 [Ø.15 - Ø.28]

0116



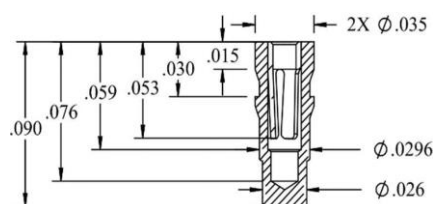
PLATING: Au/Ni CONTACT P/N: 0130
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.006 - Ø.011 [Ø.15 - Ø.28]

0169



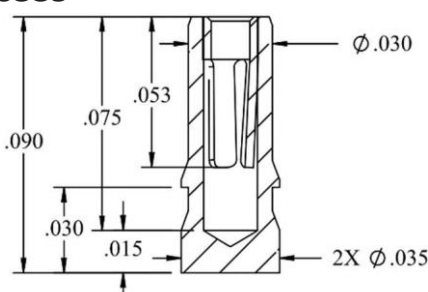
PLATING: Au/Ni CONTACT P/N: 0130
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.006 - Ø.011 [Ø.15 - Ø.28]

0205



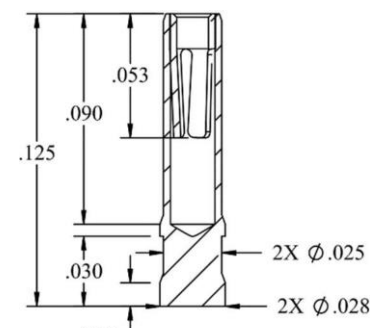
PLATING: Au/Ni CONTACT P/N: 0130
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.006 - Ø.011 [Ø.15 - Ø.28]

0339



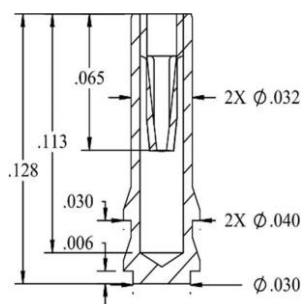
PLATING: Au/Ni CONTACT P/N: 0311
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.006 - Ø.011 [Ø.15 - Ø.28]

0355



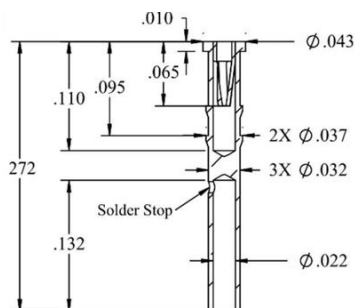
PLATING: Au/Ni CONTACT P/N: 0130
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.006 - Ø.011 [Ø.15 - Ø.28]

PART NO	FINISH
0130	Au/Ni
0311	Sn/Ni

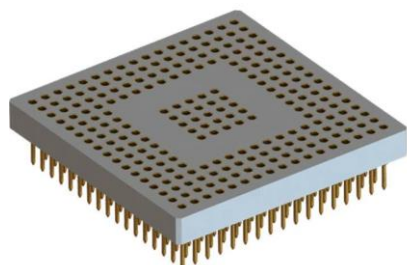


PLATING: See Table CONTACT P/N: 0048
SHELL: See Table MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.013 [Ø.15 - Ø.28]

0417



PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.013 [Ø.15 - Ø.28]



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

CONTACTS

MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194, heat treated, plated Gold per MIL-G-45204 Type 2, Grade C, Class 0, 30µ In. Min. or Class 00, 10µ In. Min., over Nickel per QQ-N-290 Class 4, 50µ In. Min. Or; Tin per MIL-T-10727 Type I, 200µ In. Min over Nickel, 50µ In. Min.

DIMENSIONS ARE IN INCHES

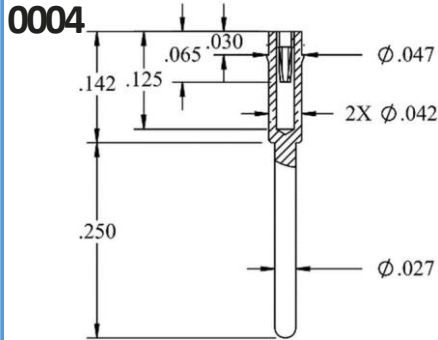
DIMENSIONAL TOLERANCES:

DRAWINGS NOT TO SCALE

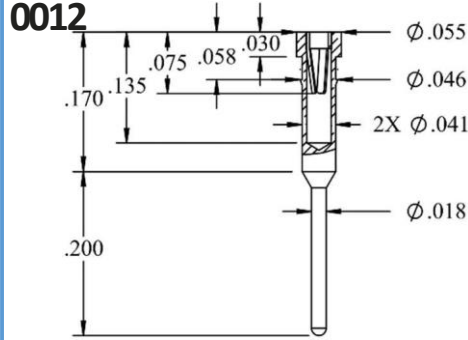
DIAMETERS
±.002

ANGLES
±2°

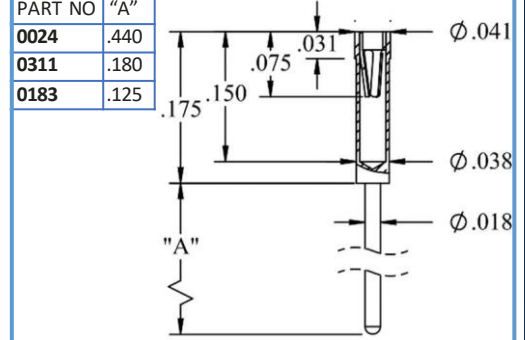
LENGTHS
±.005



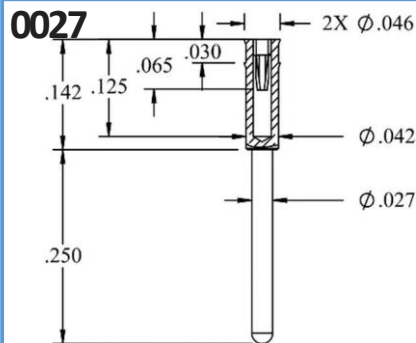
PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]



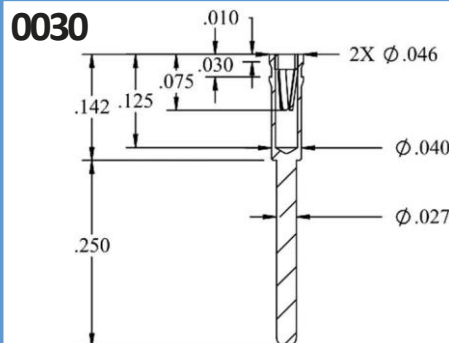
PLATING: Au/Ni CONTACT P/N: 0069
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



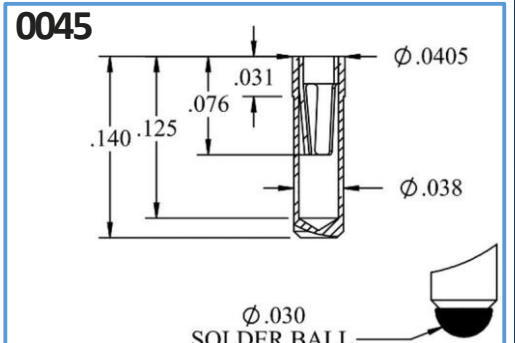
PLATING: Au/Ni CONTACT P/N: 0132
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

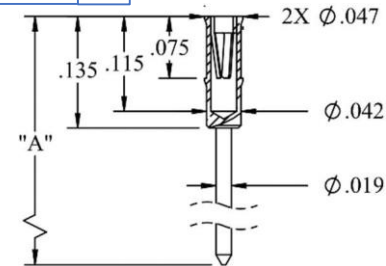


PLATING: Au/Ni CONTACT P/N: 0069
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

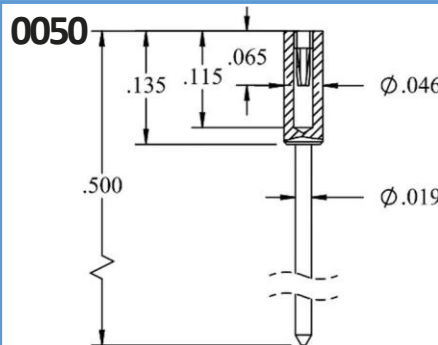


PLATING: Au/Ni CONTACT P/N: 0132
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

PART NO	"A"
0049	.500
0094	.650

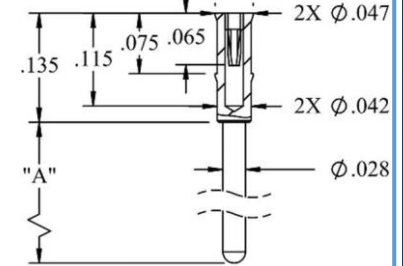


PLATING: Au/Ni CONTACT P/N: 0069
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

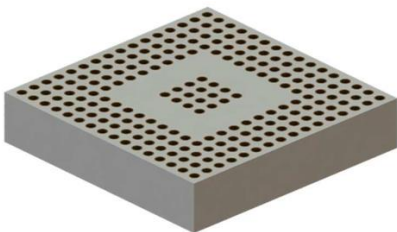


PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

PART NO	"A"
0051 [0080]	.365
0083	.515



PLATING: Au/Ni CONTACT P/N:
0048 SHELL: BeCu MATING
PIN: CONTACT: Au/Ni Ø.007 - Ø.012
[Ø.18 - Ø.31]



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard
plated Gold per MIL-G-45204 Type 2, Grade C,
10µ In. Min. over Nickel, 100µ In. Min. per QQ-
N-290 Class 4. Or Tin per MIL-T-10727 Type I,
200µ In. Min. over Nickel 100µ In. Min.

CONTACTS

MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,
heat treated, plated Gold per MIL-G-45204 Type
2, Grade C, Class 0, 30µ In. Min. or Class 00,
10µ In. Min., over Nickel per QQ-N-290 Class 4,
50µ In. Min. Or; Tin per MIL-T-10727 Type I,
200µ In. Min over Nickel, 50µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

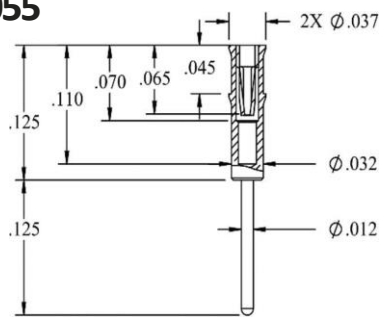
DRAWINGS NOT TO SCALE

DIAMETERS
±.002

ANGLES
±2°

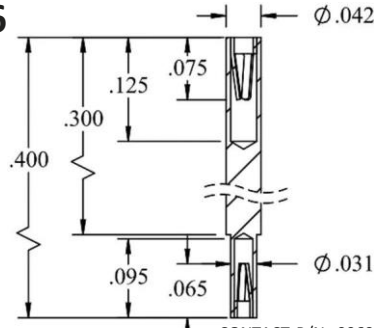
LENGTHS
±.005

0055



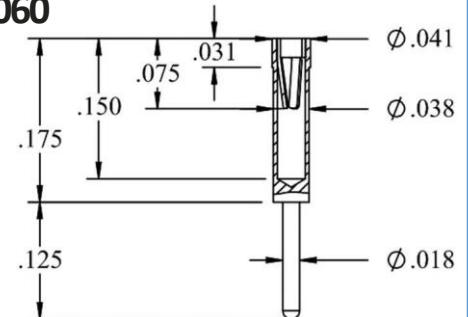
PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

0056



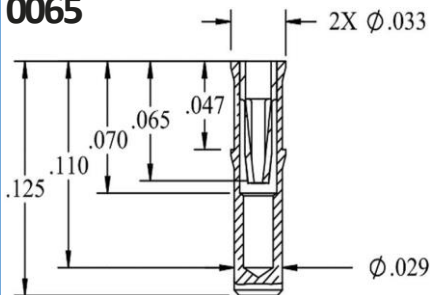
PLATING: Au/Ni CONTACT P/N: 0069 (TOP)
SHELL: BeCu MATING PIN: Ø.006 - Ø.011 [Ø.15 - Ø.28]
CONTACT: Au/Ni CONTACT P/N: 0048 (BOTTOM)
MATING PIN: Ø.007 - Ø.012 [Ø.18 - Ø.31]

0060



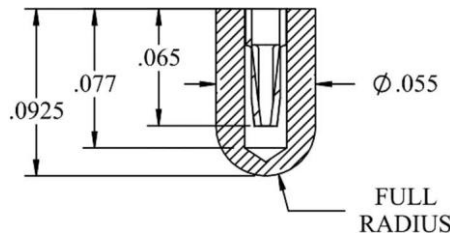
PLATING: Au/Ni CONTACT P/N: 0069
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

0065



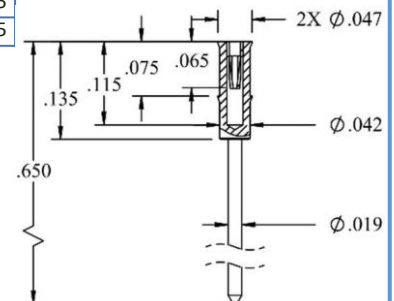
PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

PART NO	FINISH
0074	Sn/Ni
0075	Au/Ni



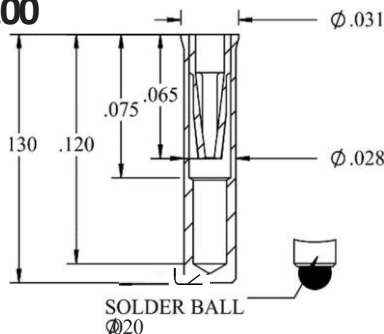
PLATING: Au/Ni CONTACT P/N: 0048
SHELL: See Table MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

PART NO	"A"
0082	.515
0093	.365



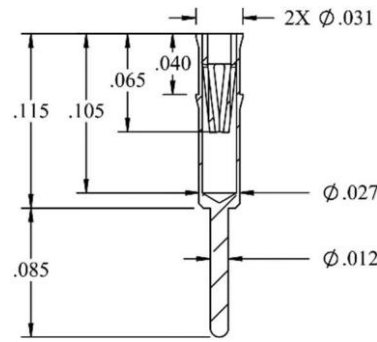
PLATING: Au/Ni CONTACT P/N: 0069
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

0100



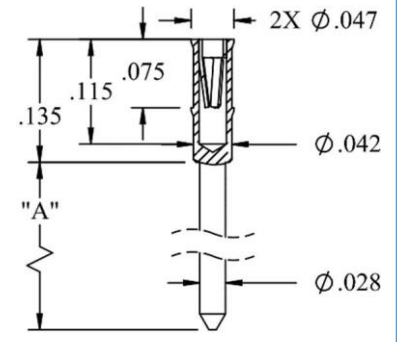
PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

0103

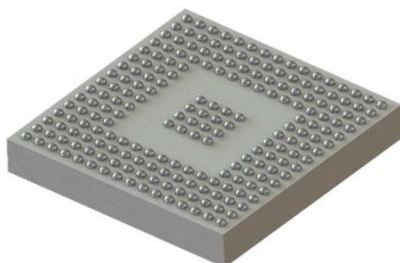


PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]

0104



PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard
plated Gold per MIL-G-45204 Type 2, Grade C,
10µ In. Min. over Nickel, 100µ In. Min. per QQ-
N-290 Class 4. Or Tin per MIL-T-10727 Type I,
200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

DRAWINGS NOT TO SCALE

DIAMETERS
±.002

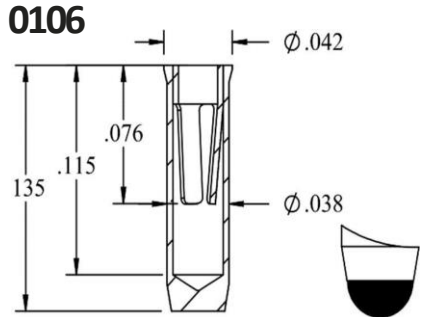
ANGLES
±2°

LENGTHS
±.005

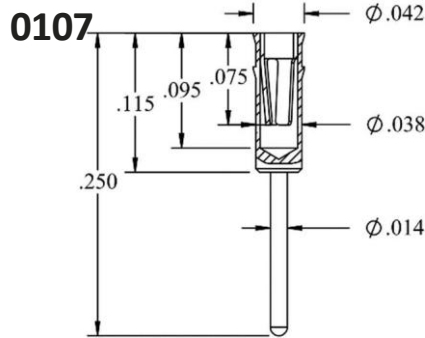
CONTACTS

MATERIAL \ FINISH

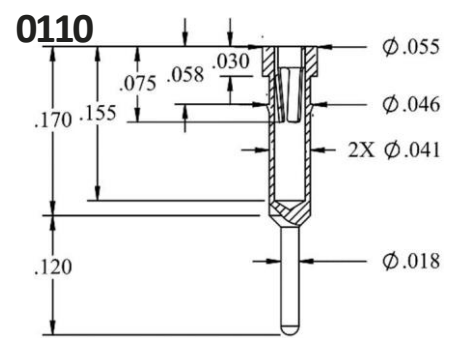
Beryllium Copper, Alloy C17200 per ASTM-B194,
heat treated, plated Gold per MIL-G-45204 Type
2, Grade C, Class 0, 30µ In. Min. or Class 00,
10µ In. Min., over Nickel per QQ-N-290 Class 4,
50µ In. Min. Or; Tin per MIL-T-10727 Type I,
200µ In. Min over Nickel, 50µ In. Min.



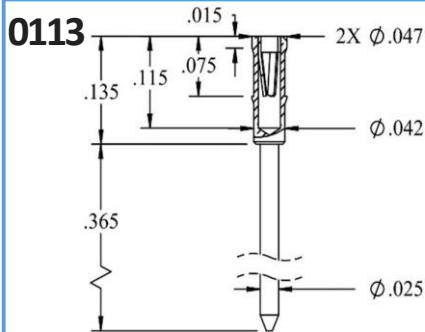
PLATING: Au/Ni CONTACT P/N: 0132
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



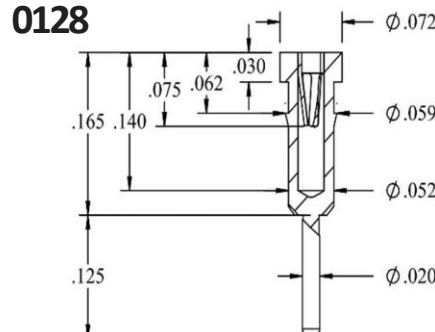
PLATING: Au/Ni CONTACT P/N: 0132
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



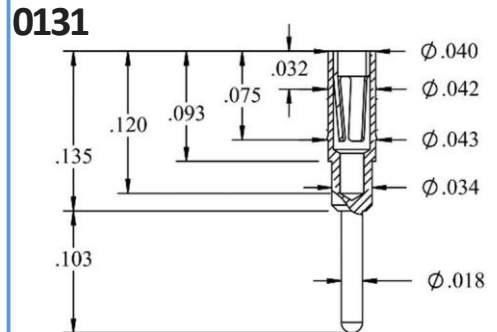
PLATING: Au/Ni CONTACT P/N: 0132
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



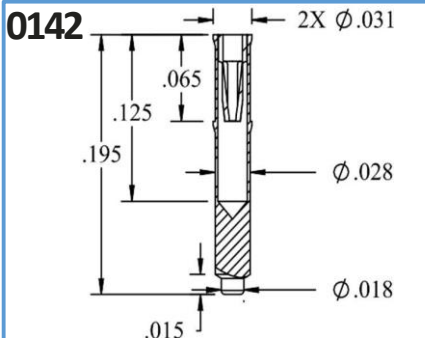
PLATING: Au/Ni CONTACT P/N: 0069
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



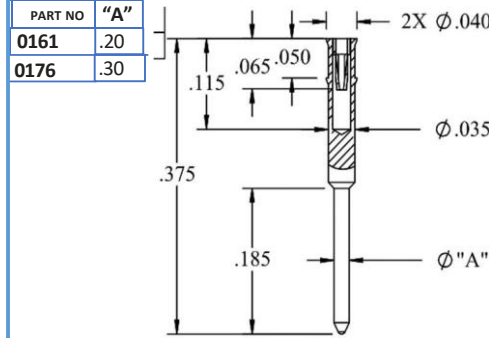
PLATING: Au/Ni CONTACT P/N: 0286
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



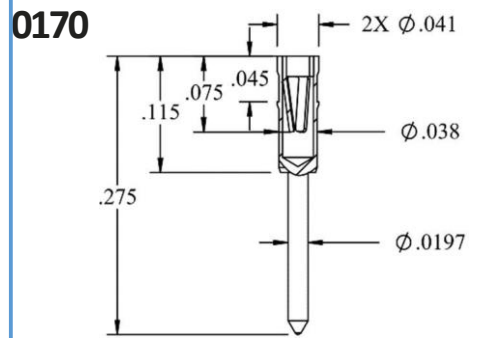
PLATING: Au/Ni CONTACT P/N: 0132
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]



PLATING: Au/Ni CONTACT P/N: 0048
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.012 [Ø.18 - Ø.31]



PLATING: Au/Ni CONTACT P/N: 0069
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

CONTACTS

MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194, heat treated, plated Gold per MIL-G-45204 Type 2, Grade C, Class 0, 30µ In. Min. or Class 00, 10µ In. Min., over Nickel per QQ-N-290 Class 4, 50µ In. Min. Or; Tin per MIL-T-10727 Type I, 200µ In. Min over Nickel, 50µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

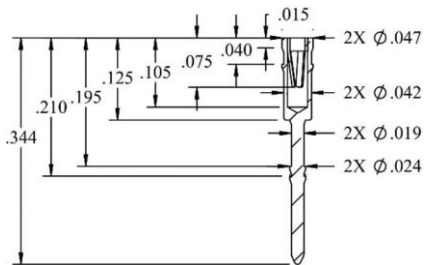
DRAWINGS NOT TO SCALE

DIAMETERS
±.002

ANGLES
±2°

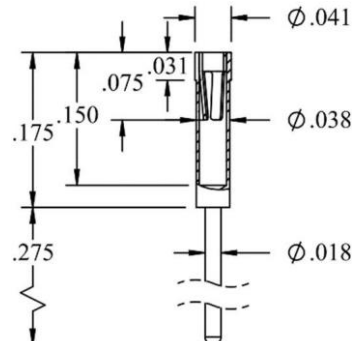
LENGTHS
±.005

0177



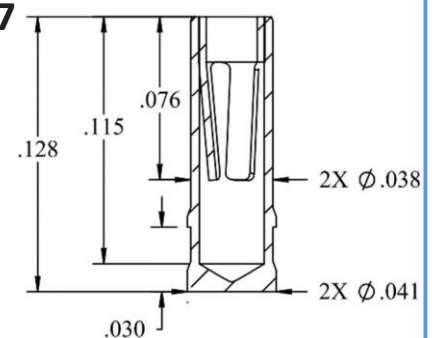
PLATING: Au/Ni CONTACT P/N: 0069
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.007 - Ø.020 [Ø.38 - Ø.51]

0191

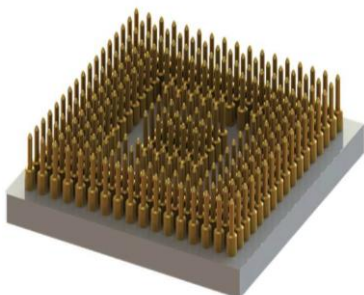


PLATING: Au/Ni CONTACT P/N: 0132
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]

0357



PLATING: Au/Ni CONTACT P/N: 0132
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.015 - Ø.020 [Ø.38 - Ø.51]



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard
plated Gold per MIL-G-45204 Type 2, Grade C,
10µ In. Min. over Nickel, 100µ In. Min. per QQ-
N-290 Class 4. Or Tin per MIL-T-10727 Type I,
200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

DRAWINGS NOT TO SCALE

DIAMETERS
±.002

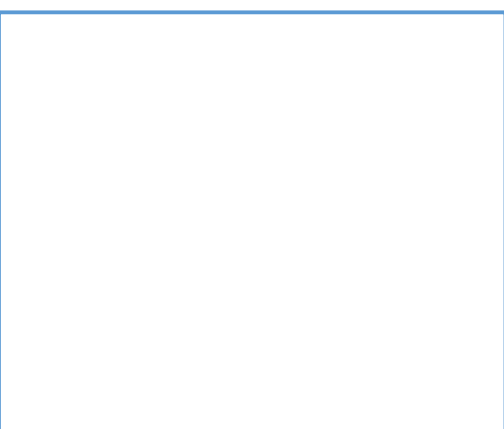
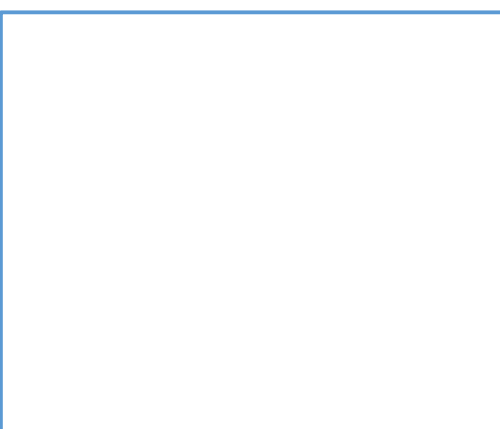
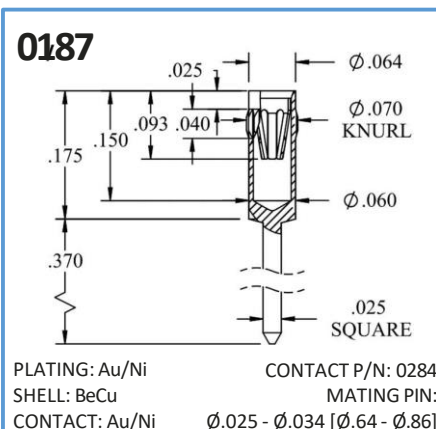
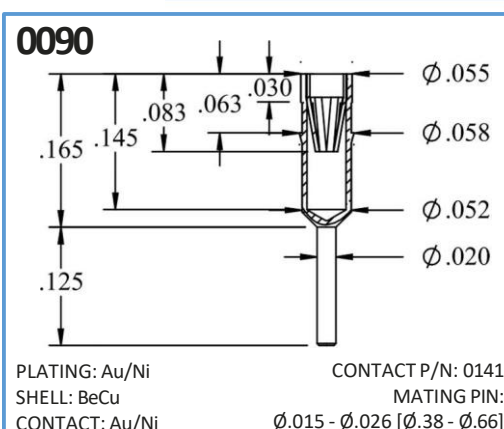
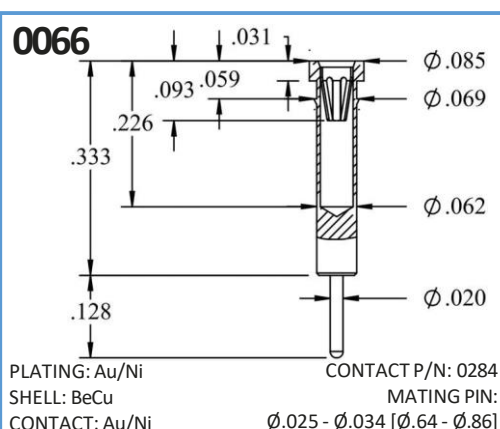
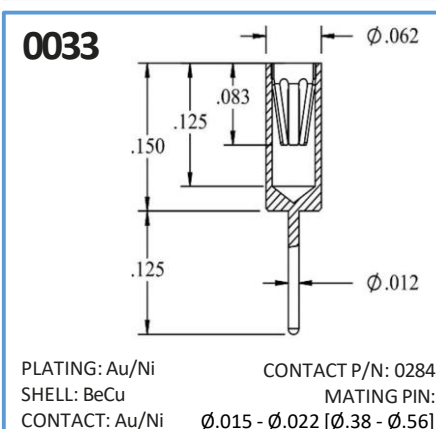
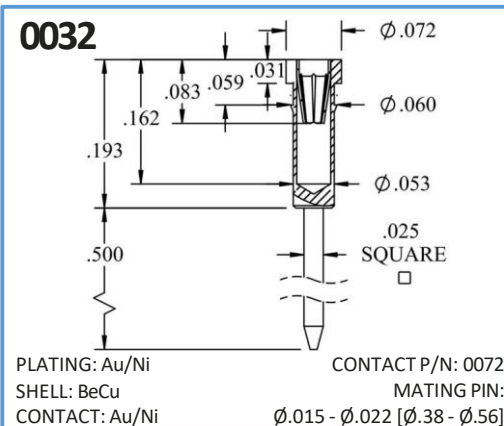
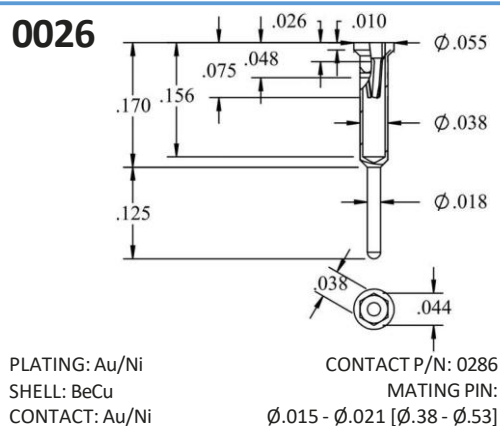
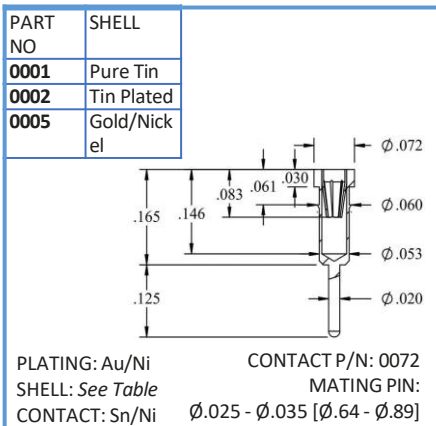
ANGLES
±2°

LENGTHS
±.005

CONTACTS

MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,
heat treated, plated Gold per MIL-G-45204 Type
2, Grade C, Class 0, 30µIn. Min. or Class 00,
10µIn. Min., over Nickel per QQ-N-290 Class 4,
50µIn. Min. Or; Tin per MIL-T-10727 Type I,
200µIn. Min over Nickel, 50µIn. Min.



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard
plated Gold per MIL-G-45204 Type 2, Grade C,
10µ In. Min. over Nickel, 100µ In. Min. per QQ-
N-290 Class 4. Or Tin per MIL-T-10727 Type I,
200µ In. Min. over Nickel 100µ In. Min.

CONTACTS

MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,
heat treated, plated Gold per MIL-G-45204 Type
2, Grade C, Class 0, 30µ In. Min. or Class 00,
10µ In. Min., over Nickel per QQ-N-290 Class 4,
50µ In. Min. Or; Tin per MIL-T-10727 Type I,
200µ In. Min over Nickel, 50µ In. Min.

DIMENSIONS ARE IN INCHES

DIAMETERS

±.002

DIMENSIONAL TOLERANCES:

ANGLES

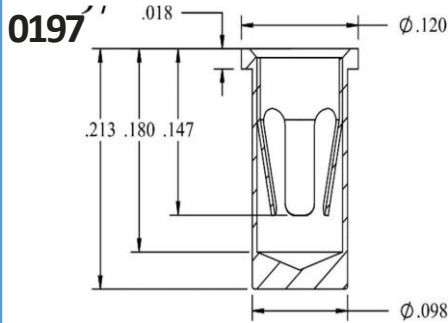
±2°

DRAWINGS NOT TO SCALE

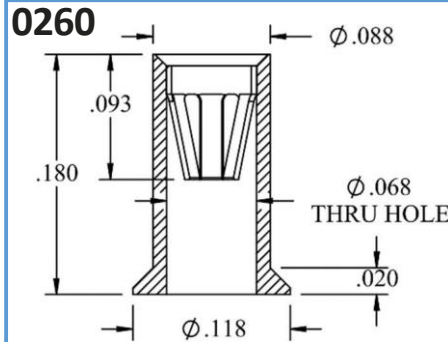
LENGTHS

±.005

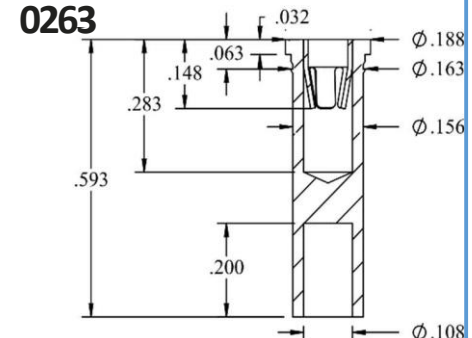
SOCKET PINS FOR Ø0.025 ~ Ø0.082 PINS



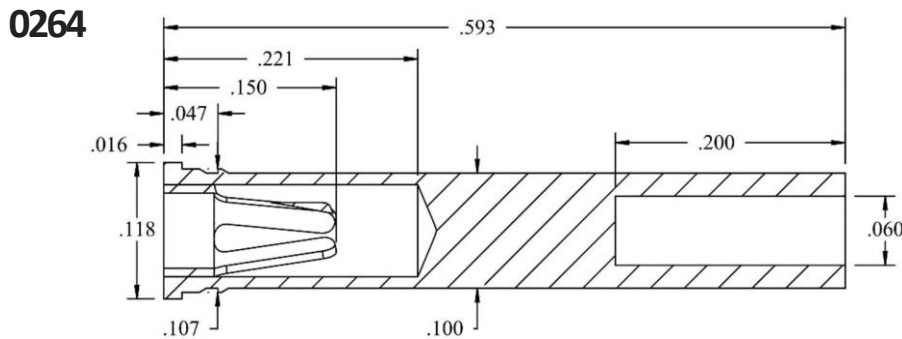
PLATING: Au/Ni
SHELL: BeCu
CONTACT: Au/Ni
CONTACT P/N: 0291
MATING PIN:
Ø.040 - Ø.059 [Ø1.07 - Ø1.50]



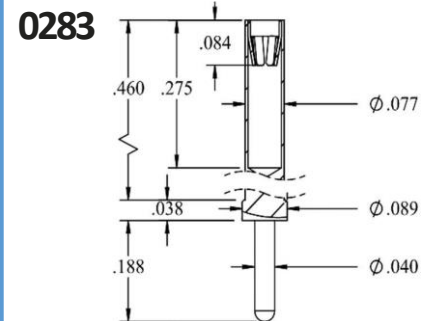
PLATING: Au/Ni
SHELL: BeCu
CONTACT: Au/Ni
CONTACT P/N: 0248
MATING PIN:
Ø.040 - Ø.050 [Ø1.02 - Ø1.27]



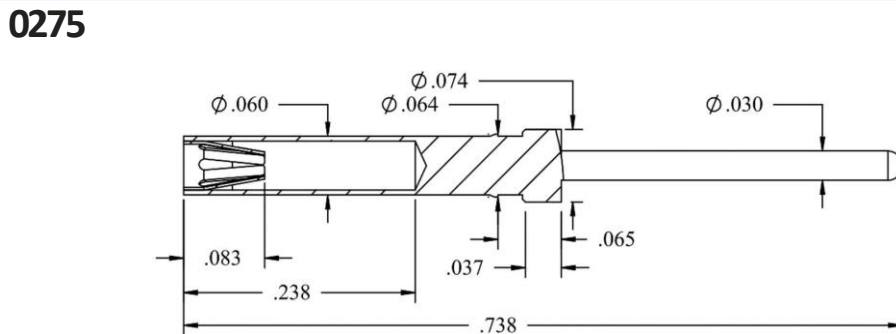
PLATING: Au/Ni
SHELL: BeCu
CONTACT: Au/Ni
CONTACT P/N: 0291
MATING PIN:
Ø.040 - Ø.059 [Ø1.07 - Ø1.50]



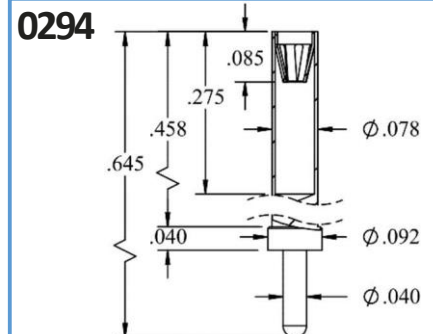
PLATING: Au/Ni
SHELL: BeCu
CONTACT: Au/Ni
CONTACT P/N: 0291
MATING PIN:
Ø.040 - Ø.059 [Ø1.07 - Ø1.50]



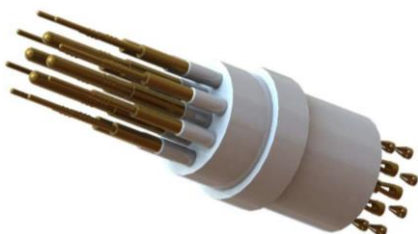
PLATING: Au/Ni
SHELL: BeCu
CONTACT: Au/Ni
CONTACT P/N: 0248
MATING PIN:
Ø.040 - Ø.050 [Ø1.02 - Ø1.27]



PLATING: Au/Ni
SHELL: BeCu
CONTACT: Au/Ni
CONTACT P/N: 284
MATING PIN:
Ø.025 - Ø.035 [Ø.64 - Ø.89]



PLATING: Au/Ni
SHELL: BeCu
CONTACT: Au/Ni
CONTACT P/N: 0248
MATING PIN:
Ø.040 - Ø.050 [Ø1.02 - Ø1.27]



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard
plated Gold per MIL-G-45204 Type 2, Grade C,
10µ In. Min. over Nickel, 100µ In. Min. per QQ-
N-290 Class 4. Or Tin per MIL-T-10727 Type I,
200µ In. Min. over Nickel 100µ In. Min.

CONTACTS

MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,
heat treated, plated Gold per MIL-G-45204 Type
2, Grade C, Class 0, 30µ In. Min. or Class 00,
10µ In. Min., over Nickel per QQ-N-290 Class 4,
50µ In. Min. Or; Tin per MIL-T-10727 Type I,
200µ In. Min over Nickel, 50µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

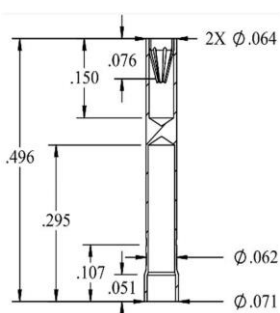
DRAWINGS NOT TO SCALE

DIAMETERS
±.002

ANGLES
±2°

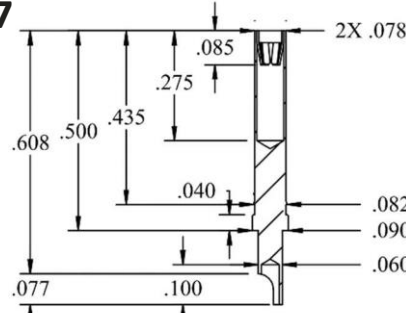
LENGTHS
±.005

0346



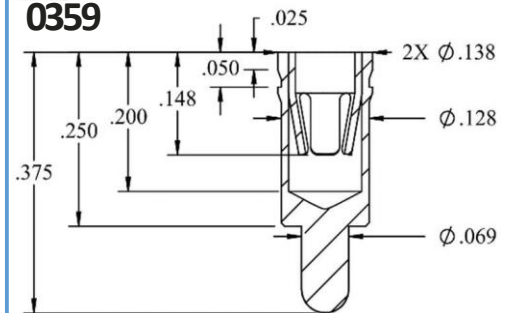
PLATING: Au/Ni CONTACT P/N: 0043
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.025 - Ø.037 [Ø.64 - Ø.90]

0347



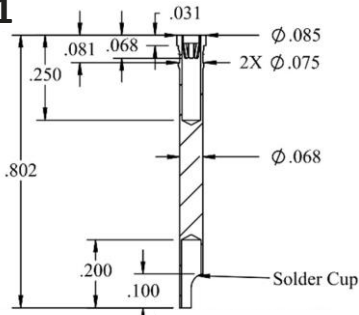
PLATING: Au/Ni CONTACT P/N: 0248
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.040 - Ø.050 [Ø1.02 - Ø1.27]

0359



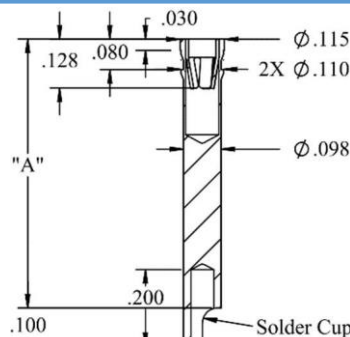
PLATING: Sn/Ni CONTACT P/N: 0292
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.065 - Ø.082 [Ø1.65 - Ø2.08]

0361



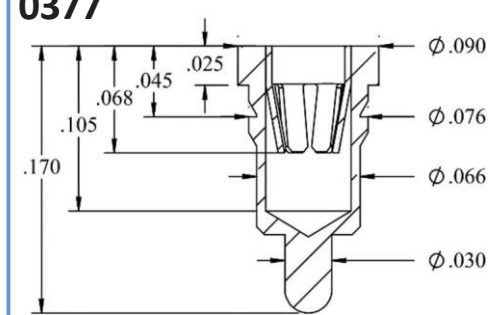
PLATING: Au/Ni CONTACT P/N: 0366
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.037 - Ø.043 [Ø.94 - Ø1.09]

PART NO	"A"
0362	.702
0393	.782



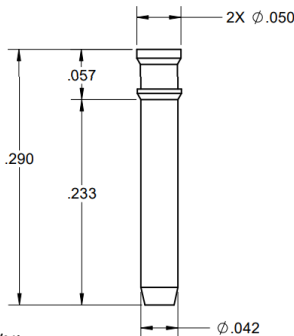
PLATING: Au/Ni CONTACT P/N: 0365
SHELL: BeCu MATING PIN:
CONTACT: Au/Ni Ø.048 - Ø.064 [Ø1.22 - Ø1.63]

0377

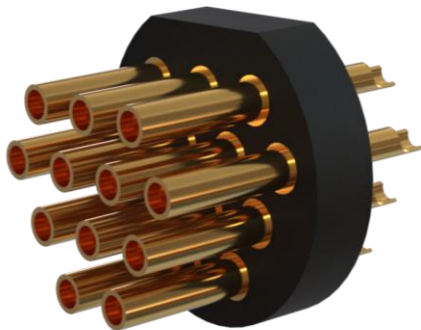


PLATING: Sn/Ni
SHELL: BeCu
CONTACT: Au/Ni

0617



PLATING: Au/Ni
SHELL: BeCu
CONTACT: Au/Ni



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard
plated Gold per MIL-G-45204 Type 2, Grade C,
10µ In. Min. over Nickel, 100µ In. Min. per QQ-
N-290 Class 4. Or Tin per MIL-T-10727 Type I,
200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIAMETERS
±.002

DIMENSIONAL TOLERANCES:

ANGLES
±2°

CONTACTS

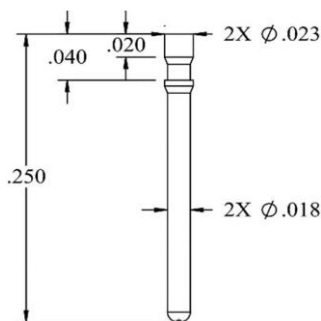
MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194,
heat treated, plated Gold per MIL-G-45204 Type
2, Grade C, Class 0, 30µ In. Min. or Class 00,
10µ In. Min., over Nickel per QQ-N-290 Class 4,
50µ In. Min. Or; Tin per MIL-T-10727 Type I,
200µ In. Min over Nickel, 50µ In. Min.

DRAWINGS NOT TO SCALE

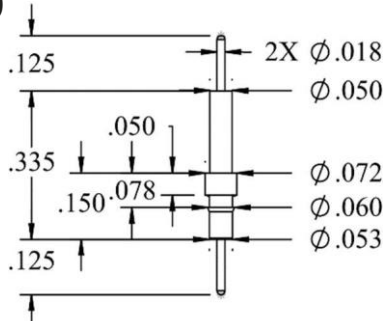
LENGTHS
±.005

0006



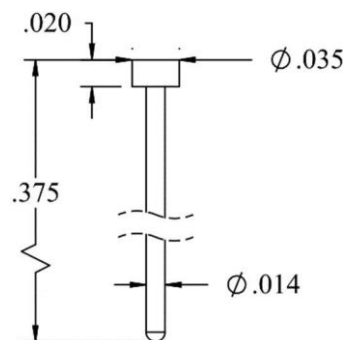
PLATING: Au/Ni
SHELL: BeCu

0009



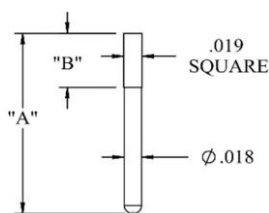
PLATING: Au/Ni
SHELL: BeCu

0026



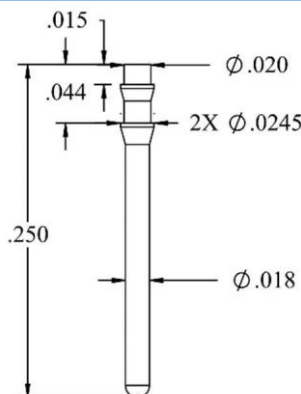
PLATING: Au/Ni
SHELL: BeCu

PART NO	DIM"A"	DIM"B"	PLATING
0013	.200	.060	Sn/Ni
0070	.260	.070	Sn/Ni
0021	.303	.060	Sn/Ni
0022	.200	.060	Au/Ni



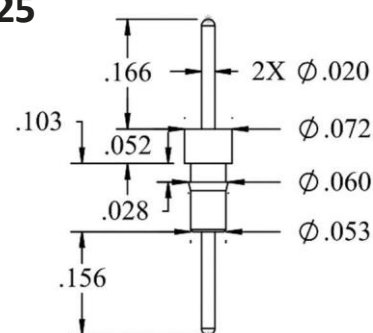
PLATING:
See Table
SHELL: See
Table

0015



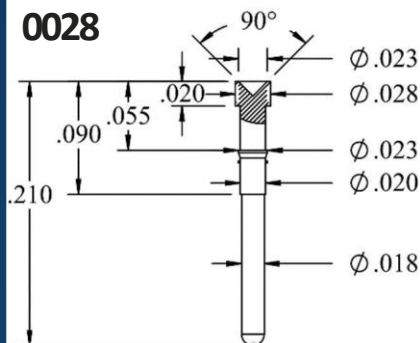
PLATING: Au/Ni
SHELL: BeCu

0025



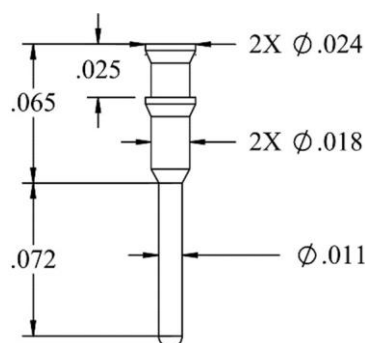
PLATING: Sn/Ni
SHELL: BeCu

0028



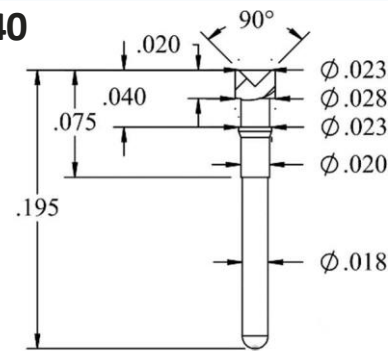
PLATING: Au/Ni
SHELL: BeCu

0039

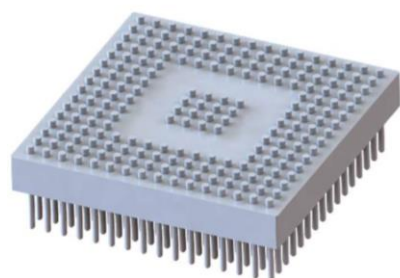


PLATING: Au/Ni
SHELL: BeCu

0040



PLATING: Au/Ni
SHELL: BeCu



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

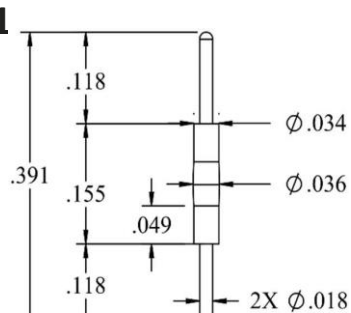
DRAWINGS NOT TO SCALE

DIAMETERS
±.002

ANGLES
±2°

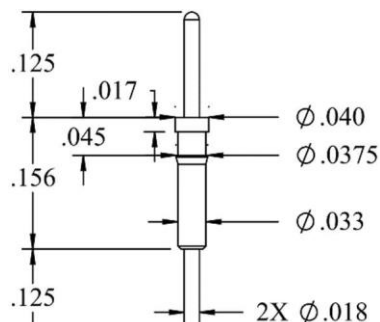
LENGTHS
±.005

0041



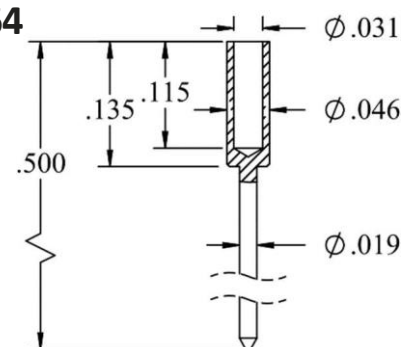
PLATING: Au/Ni
SHELL: BeCu

0058



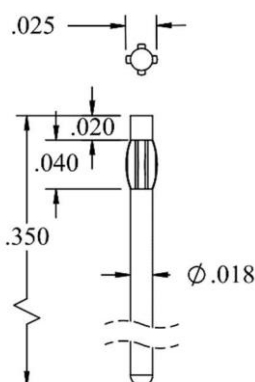
PLATING: Au/Ni
SHELL: BeCu

0064



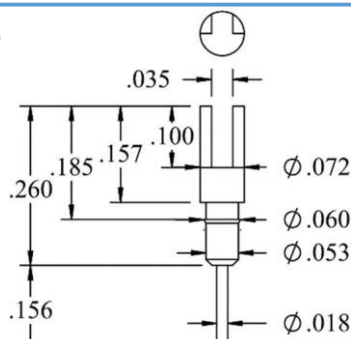
PLATING: Au/Ni
SHELL: BeCu

0076



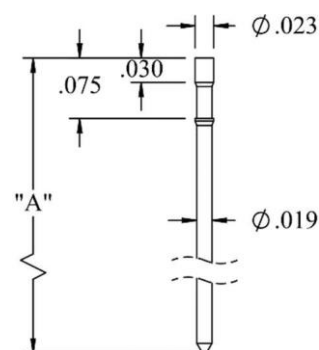
PLATING: Au/Ni
SHELL: BeCu

0084



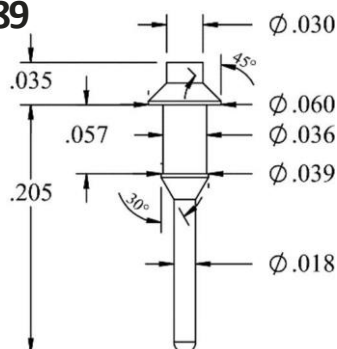
PLATING: Sn/Ni
SHELL: BeCu

PART NO	"A"
0087	.650
0088	.500



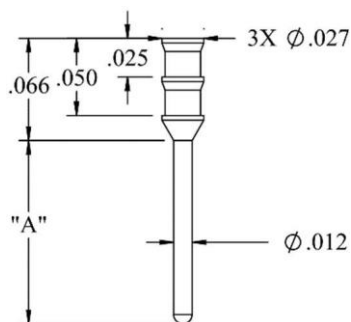
PLATING: Au/Ni
SHELL: BeCu

0089



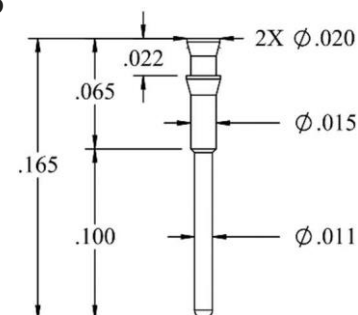
PLATING: Au/Ni
SHELL: BeCu

PART NO	"A"
0091	.119
0246.B	.129

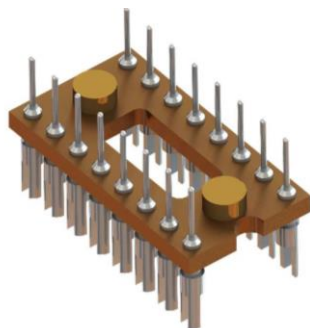


PLATING: Au/Ni
SHELL: BeCu

0095



PLATING: Au/Ni
SHELL: BeCu



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

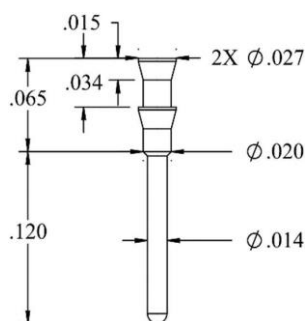
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES
DIAMETERS
±.002

DIMENSIONAL TOLERANCES:
ANGLES
±2°

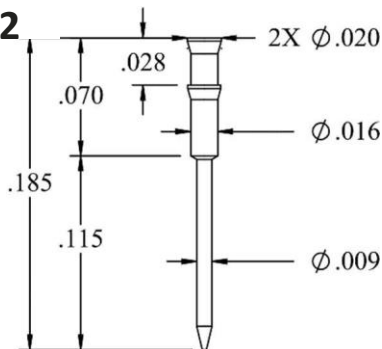
DRAWINGS NOT TO SCALE
LENGTHS
±.005

0097



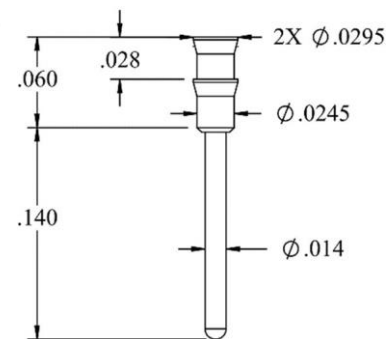
PLATING: Au/Ni
SHELL: BeCu

0102



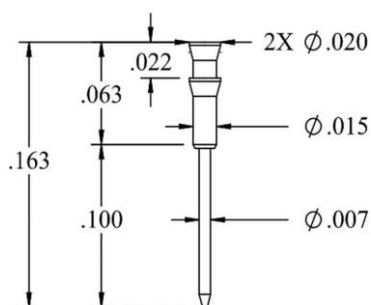
PLATING: Au/Ni
SHELL: BeCu

0105



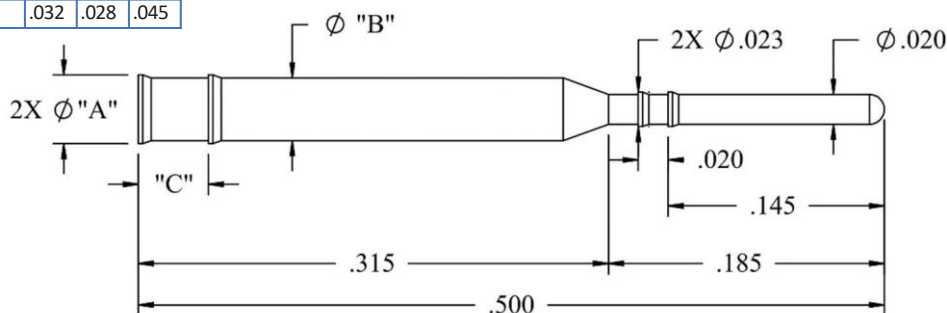
PLATING: Au/Ni
SHELL: BeCu

0108



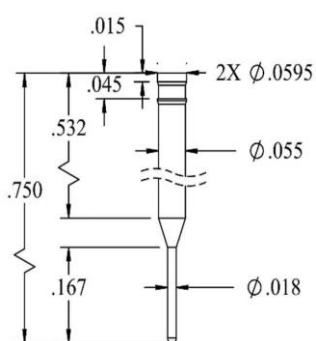
PLATING: Au/Ni
SHELL: BeCu

PART NO	"A"	"B"	"C"
0134	.046	.042	.047
0135	.032	.028	.045



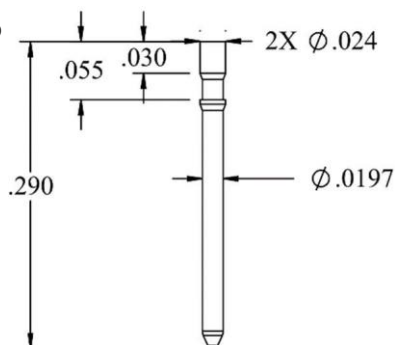
PLATING: Au/Ni
SHELL: BeCu

0164



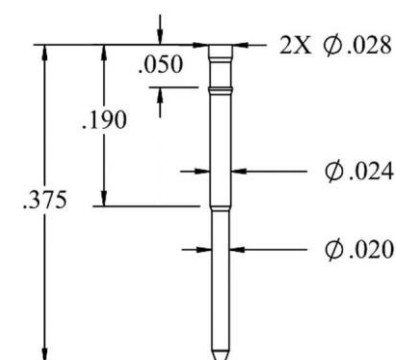
PLATING: Au/Ni
SHELL: BeCu

0165



PLATING: Au/Ni
SHELL: BeCu

0173



PLATING: Au/Ni
SHELL: BeCu



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10μ In. Min. over Nickel, 100μ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200μ In. Min. over Nickel 100μ In. Min.

DIMENSIONS ARE IN INCHES

DIAMETERS
±.002

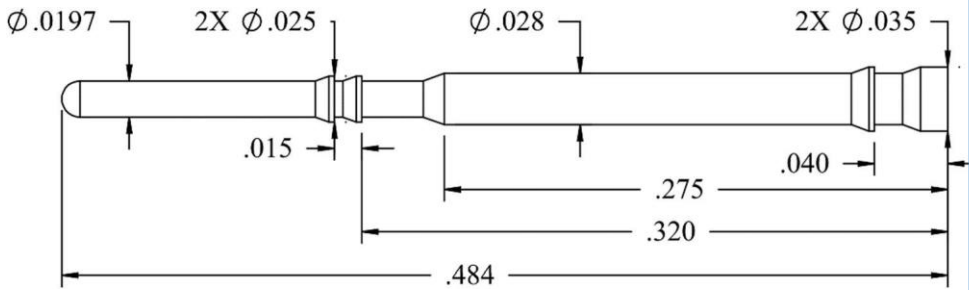
DIMENSIONAL TOLERANCES:

ANGLES
±2°

DRAWINGS NOT TO SCALE

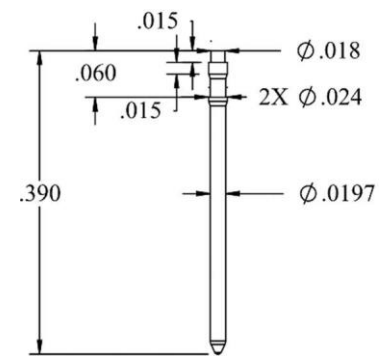
LENGTHS
±.005

0175



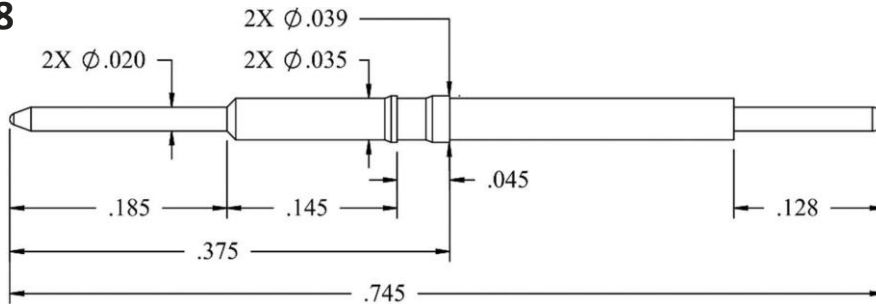
PLATING: Au/Ni
SHELL: BeCu

0179



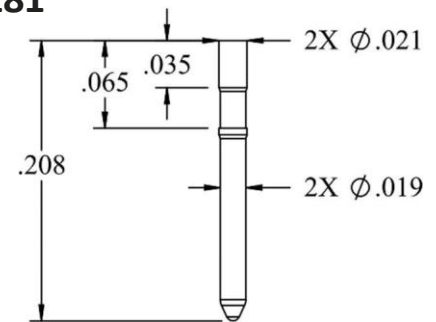
PLATING: Au/Ni
SHELL: BeCu

0178



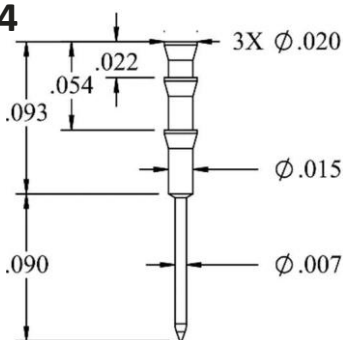
PLATING: Au/Ni SHELL:
BeCu

0181



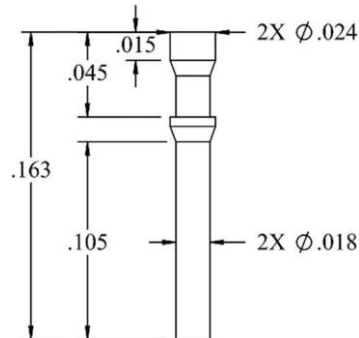
PLATING: Au/Ni
SHELL: BeCu

0184



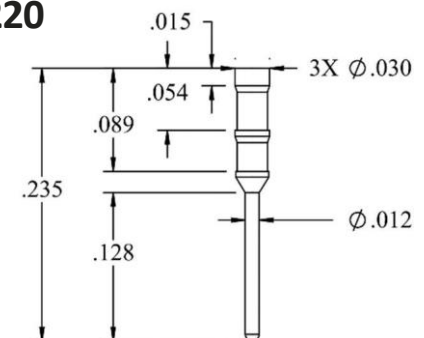
PLATING: Au/Ni
SHELL: BeCu

0186



PLATING: Au/Ni
SHELL: BeCu

0220



PLATING: Au/Ni
SHELL: BeCu

NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min, per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

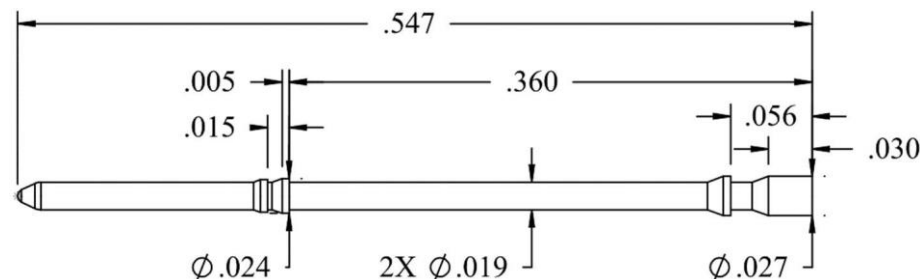
DIMENSIONS ARE IN INCHES
DIAMETERS
±.002

DIMENSIONAL TOLERANCES:
ANGLES
±2°

DRAWINGS NOT TO SCALE
LENGTHS
±.005

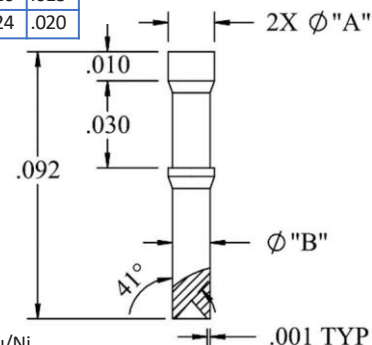


0223



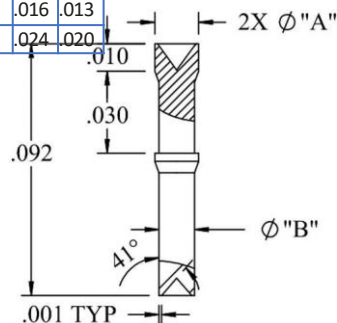
PLATING: Au/Ni
SHELL: BeCu

PART NO	Ø"A"	Ø"B"
0237	.016	.013
0238	.024	.020



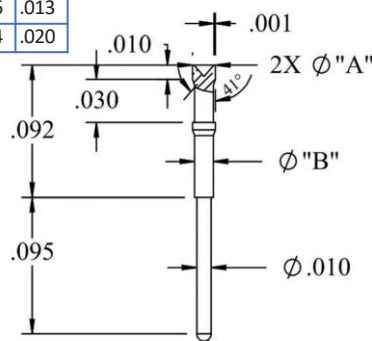
PLATING: Au/Ni
SHELL: BeCu

PART NO	Ø"A"	Ø"B"
0240	.016	.013
0241	.024	.020



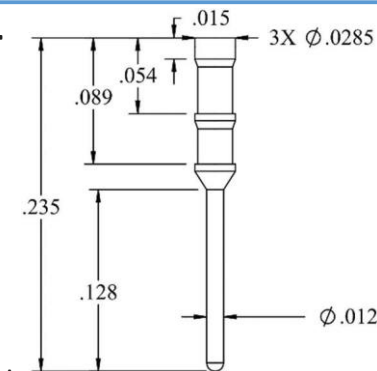
PLATING: Au/Ni
SHELL: BeCu

PART NO	Ø"A"	Ø"B"
0242	.016	.013
0243	.024	.020



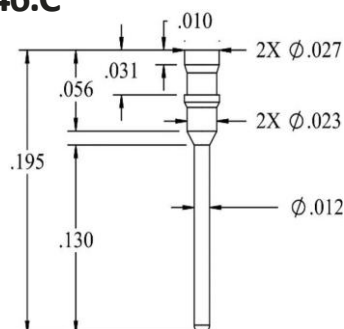
PLATING: Au/Ni
SHELL: BeCu

0244



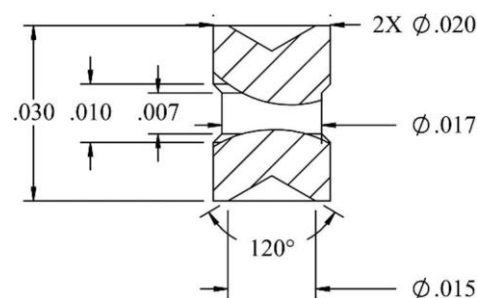
PLATING: Au/Ni
SHELL: BeCu

0246.C



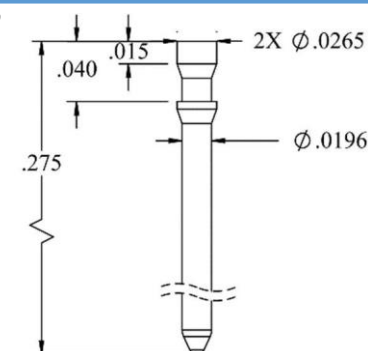
PLATING: Au/Ni
SHELL: BeCu

0253

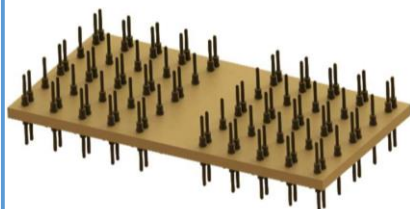


PLATING: Au/Ni
SHELL: BeCu

0267



PLATING: Au/Ni
SHELL: BeCu



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

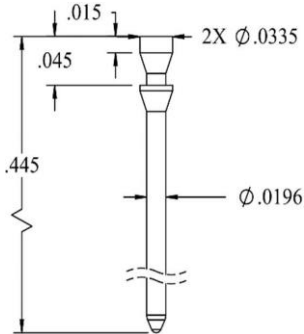
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES
DIAMETERS
±.002

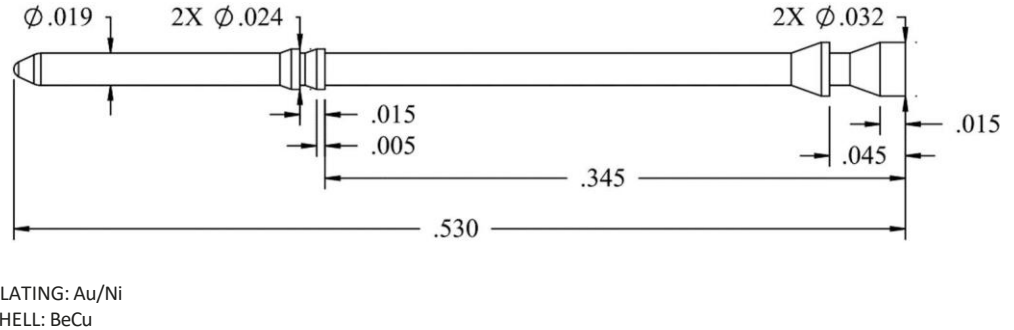
DIMENSIONAL TOLERANCES:
ANGLES
±2°

DRAWINGS NOT TO SCALE
LENGTHS
±.005

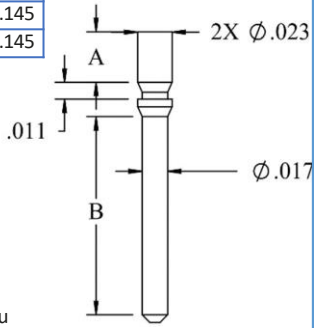
0268



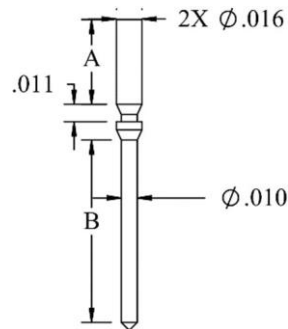
0269



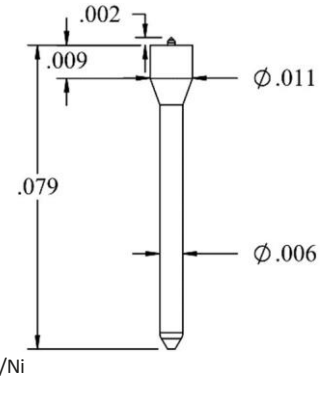
PART NO	Ø"A"	Ø"B"
0287	.033	.130
0290	.053	.145
0302	.033	.145



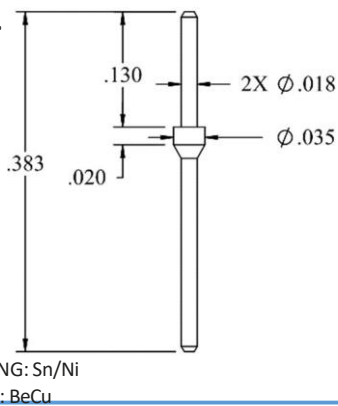
PART NO	Ø"A"	Ø"B"
0288	.033	.090
0289	.053	.114
0301	.033	.115



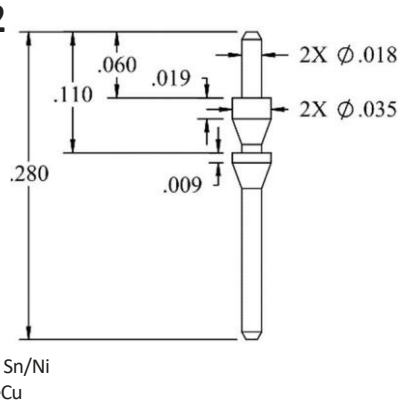
0352



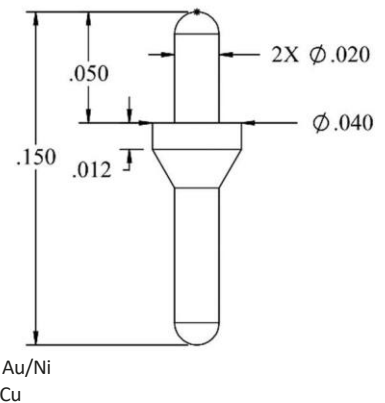
0371



0372



0373



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

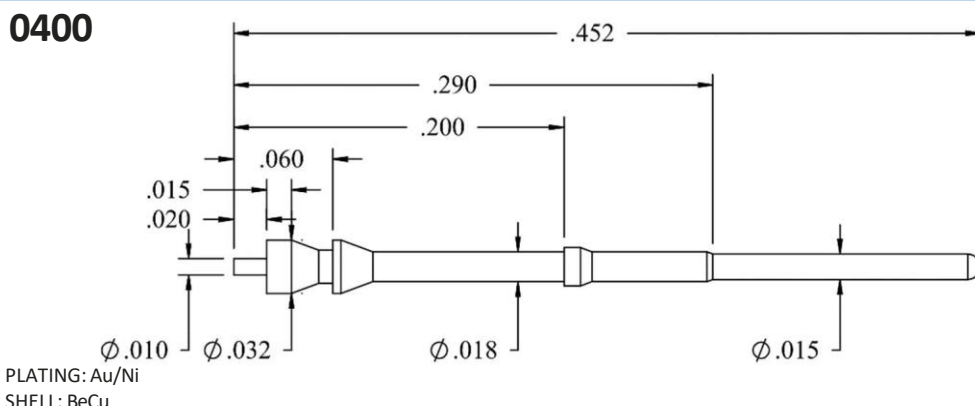
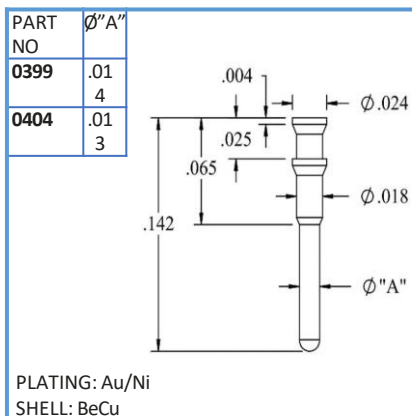
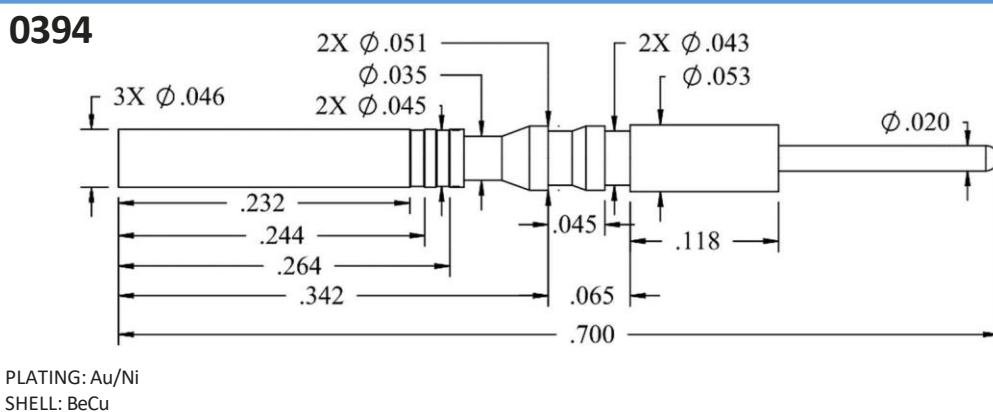
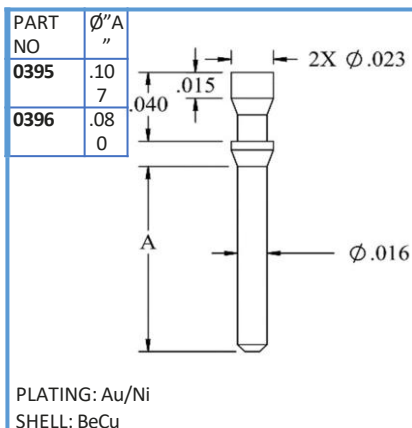
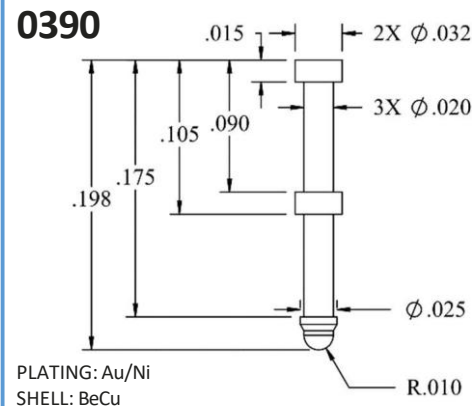
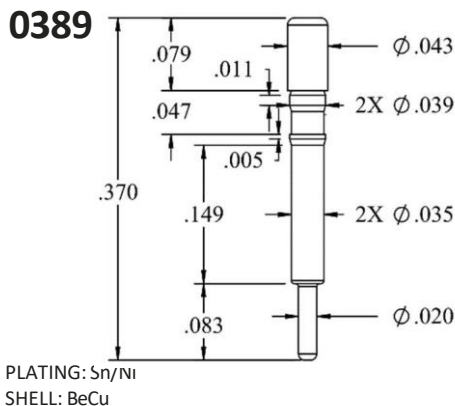
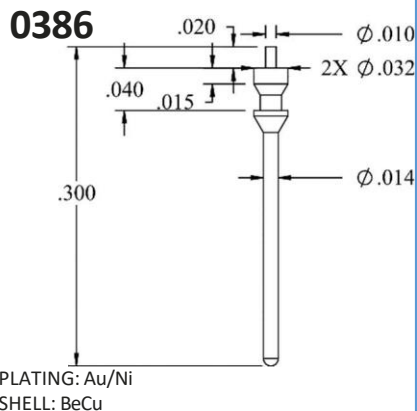
MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:
LENGTHS ±.005 DIAMETERS ±.002 ANGLES ±2°

DRAWINGS NOT TO SCALE



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

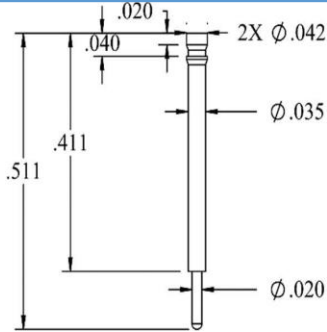
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

LENGTHS	DIAMETERS	ANGLES
±.005	±.002	±2°

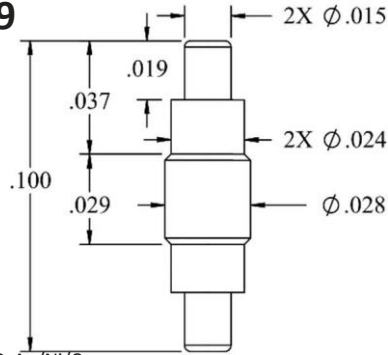
DRAWINGS NOT TO SCALE

0416



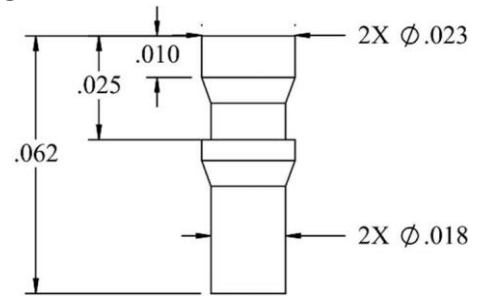
PLATING: Sn/Ni
SHELL: BeCu

0419



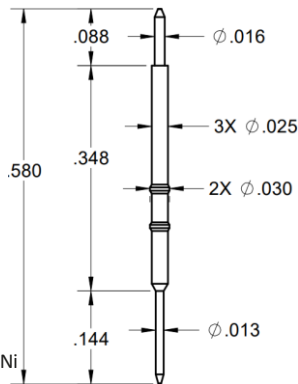
PLATING: Au/Ni/Cu
SHELL: BeCu

0421



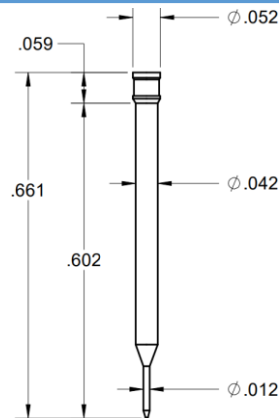
PLATING: Sn/Ni/Cu
SHELL: BeCu

0763



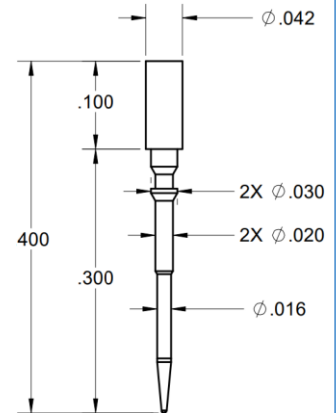
PLATING: Au/Ni
SHELL: BeCu

0769



PLATING: Au/Ni
SHELL: BeCu

0507



PLATING: Au/Ni
SHELL: BeCu

NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

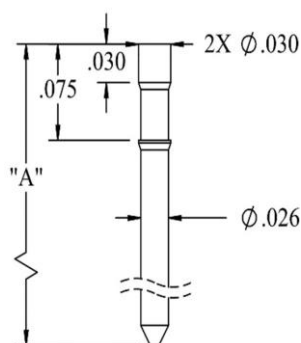
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:
LENGTHS DIAMETERS ANGLES
±.005 ±.002 ±2°

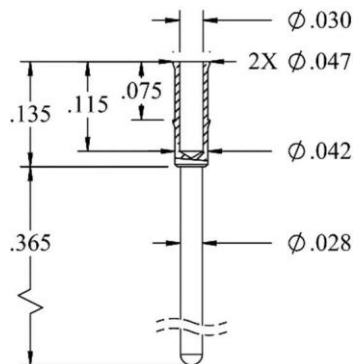
DRAWINGS NOT TO SCALE

PART NO	"A"
0046	.34 0
0086	.53 0



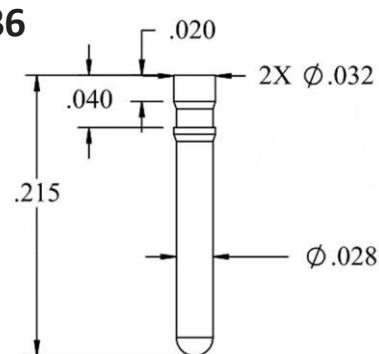
PLATING: Au/Ni
SHELL: BeCu

0063



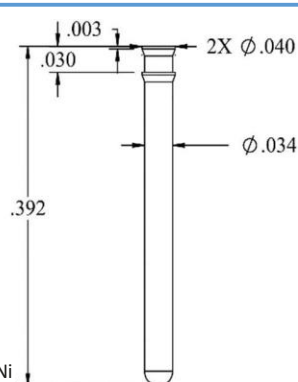
PLATING: Au/Ni
SHELL: BeCu

0136



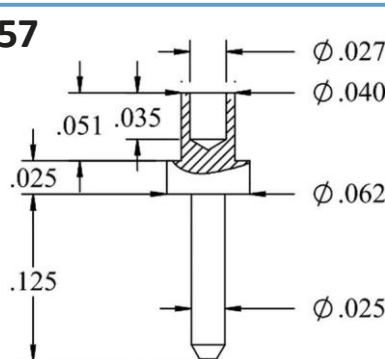
PLATING: Au/Ni
SHELL: BeCu

0146



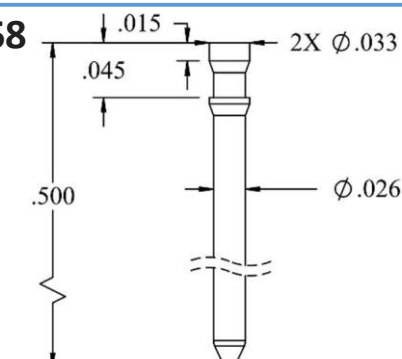
PLATING: Au/Ni
SHELL: BeCu

0157



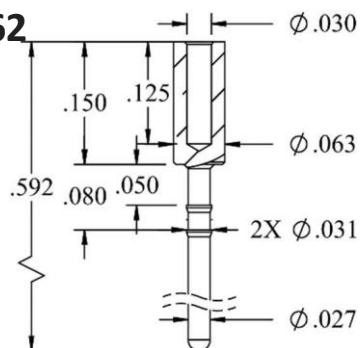
PLATING: Au/Ni
SHELL: BeCu

0158



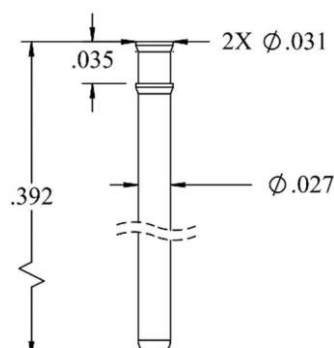
PLATING: Au/Ni
SHELL: BeCu

0162



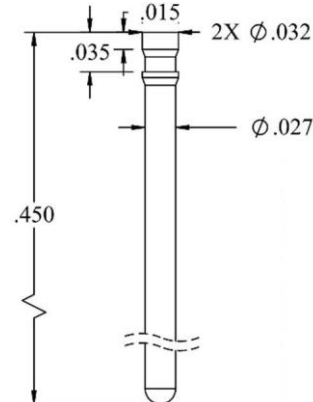
PLATING: Au/Ni
SHELL: BeCu

0163



PLATING: Au/Ni
SHELL: BeCu

0201



PLATING: Au/Ni
SHELL: BeCu

NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES MATERIAL \ FINISH

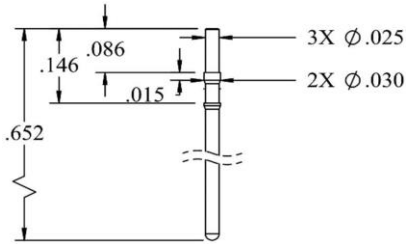
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:
LENGTHS DIAMETERS ANGLES
±.005 ±.002 ±2°

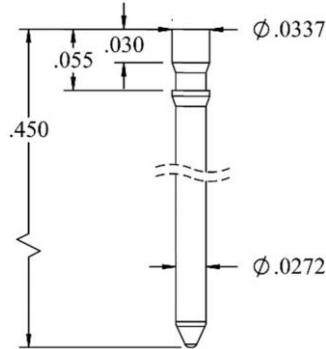
DRAWINGS NOT TO SCALE

0217



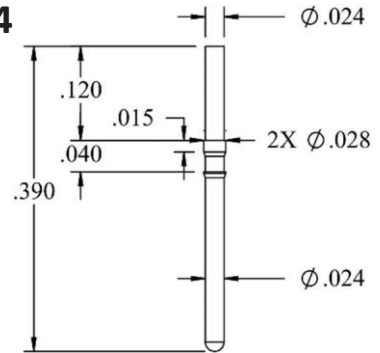
MATERIAL: PHOSPHOR BRONZE
PLATING: MATTE TIN 150-350µIN OVER
50µIN Ni. SHELL: BeCu

0234



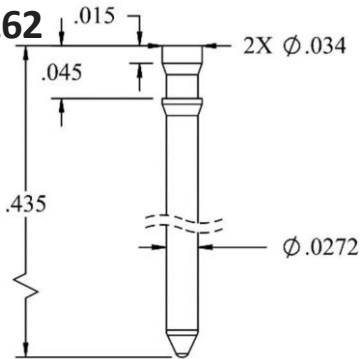
PLATING: Au/Ni
SHELL: BeCu

0254

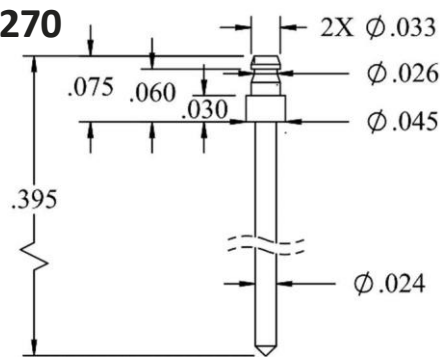


PLATING: Au/Ni
SHELL: BeCu

0262

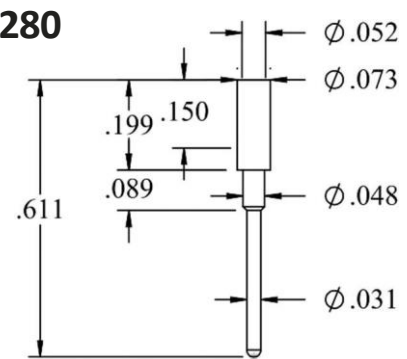


0270



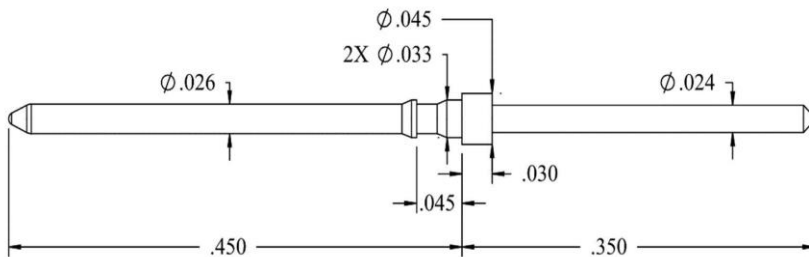
PLATING: Au/Ni
SHELL: BeCu

0280



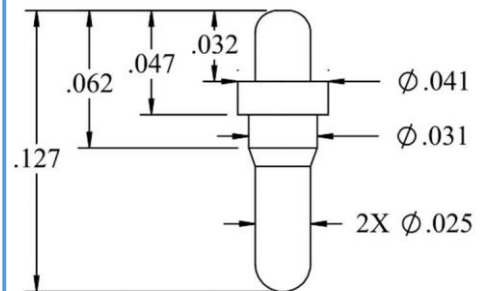
PLATING: Au/Ni
SHELL: BeCu

0282



PLATING: Au/Ni
SHELL: BeCu

0316



PLATING: Au/Ni
SHELL: BeCu

NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

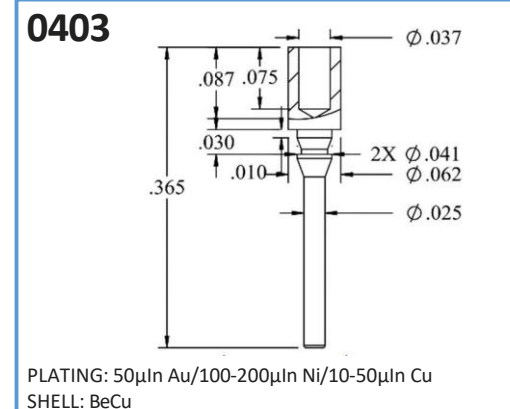
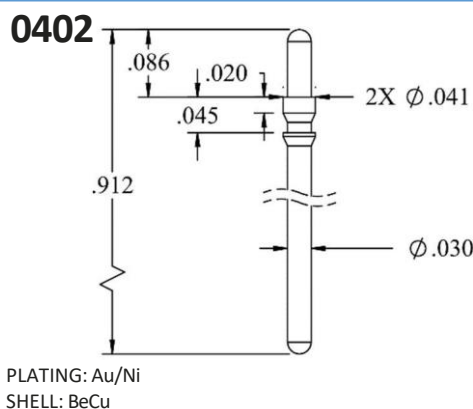
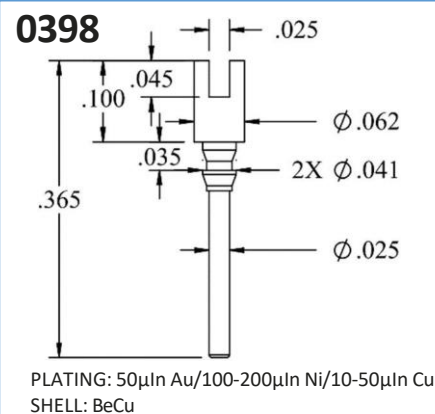
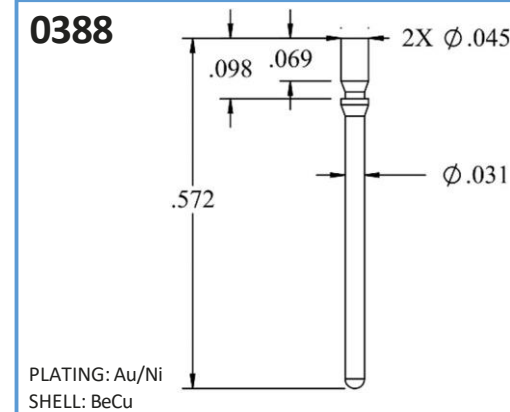
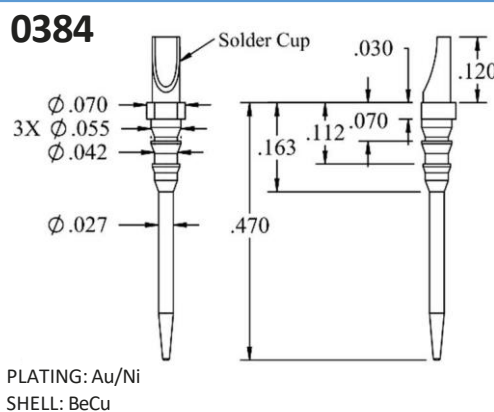
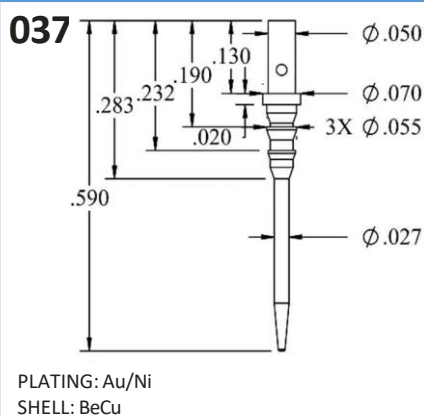
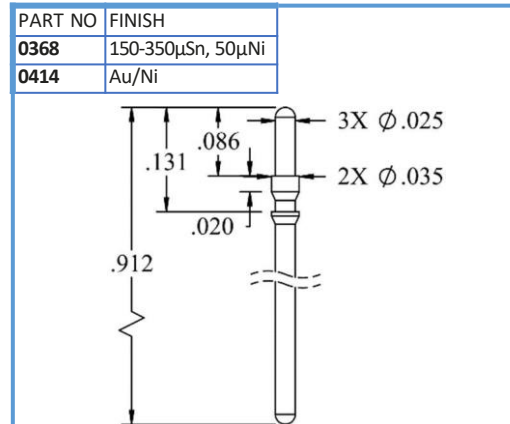
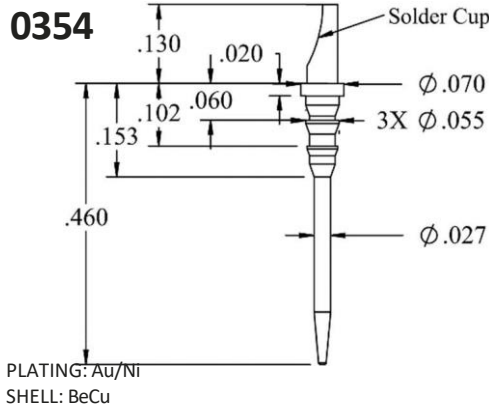
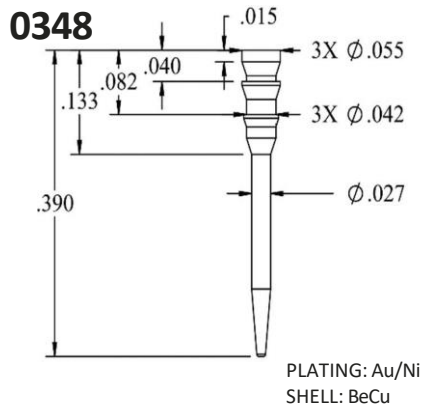
MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:
LENGTHS ±.005 DIAMETERS ±.002 ANGLES ±2°

DRAWINGS NOT TO SCALE



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

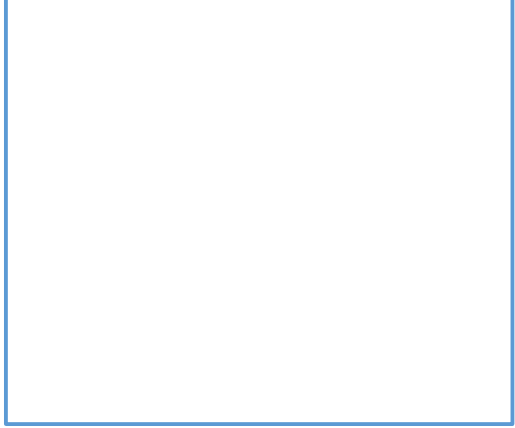
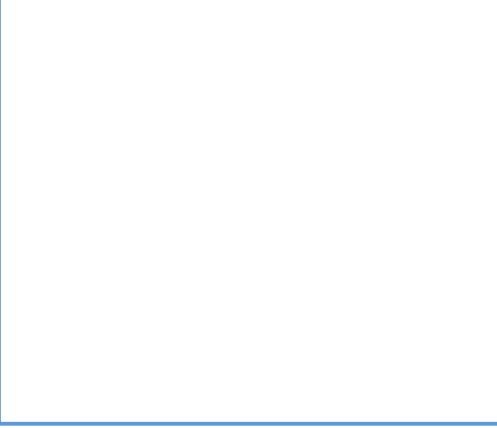
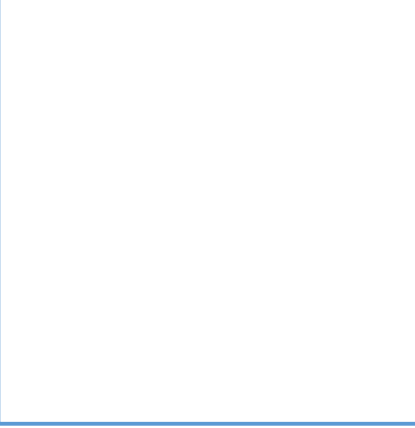
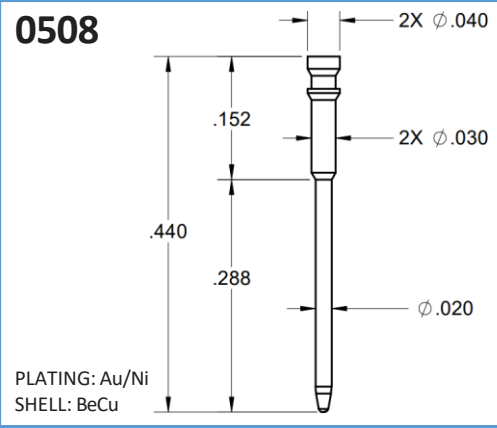
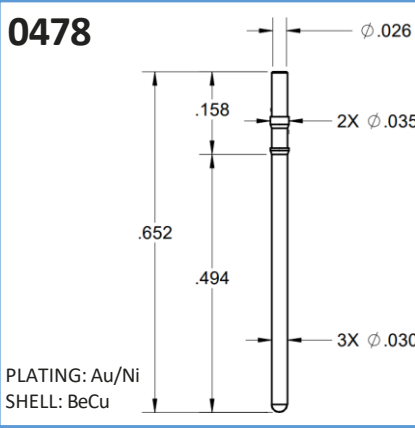
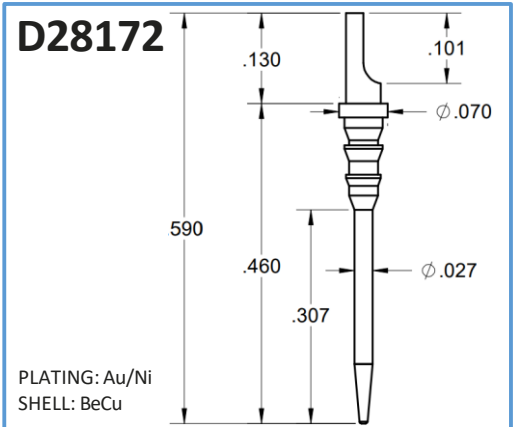
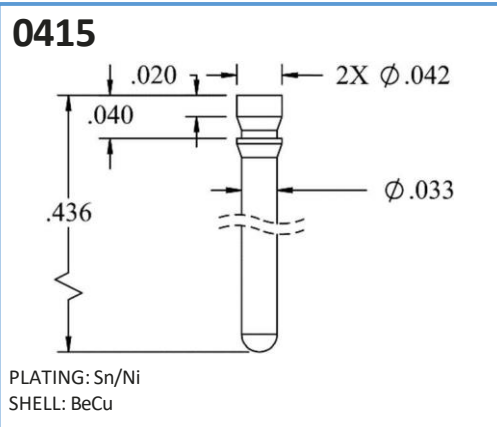
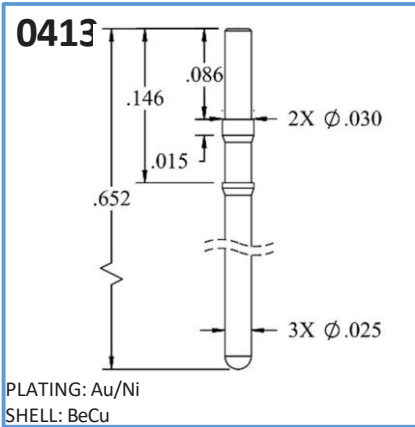
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

LENGTHS	DIAMETERS	ANGLES
±.005	±.002	±2°

DRAWINGS NOT TO SCALE



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES
MATERIAL \

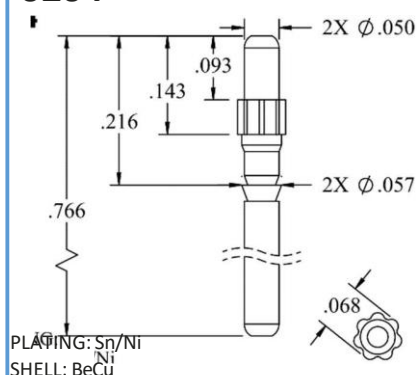
FINISH
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10µ In. Min. over Nickel, 100µ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200µ In. Min. over Nickel 100µ In. Min.

DIMENSIONS ARE IN INCHES

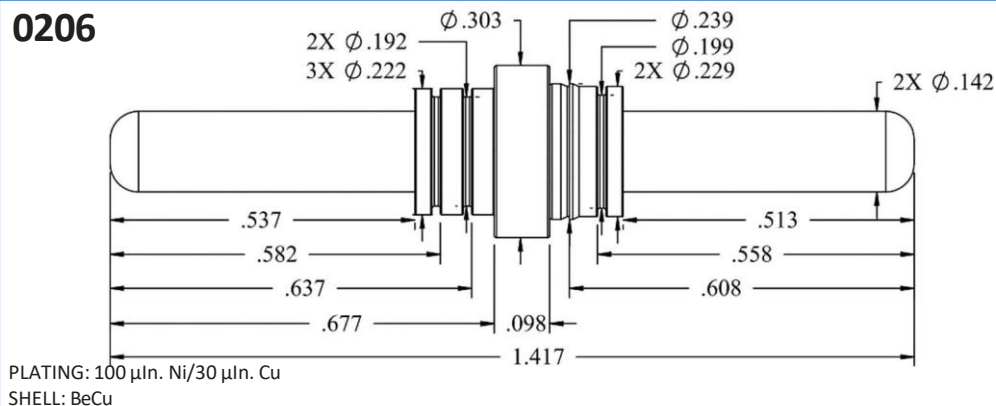
DIMENSIONAL TOLERANCES:
LENGTHS DIAMETERS ANGLES
±.005 ±.002 ±2°

DRAWINGS NOT TO SCALE

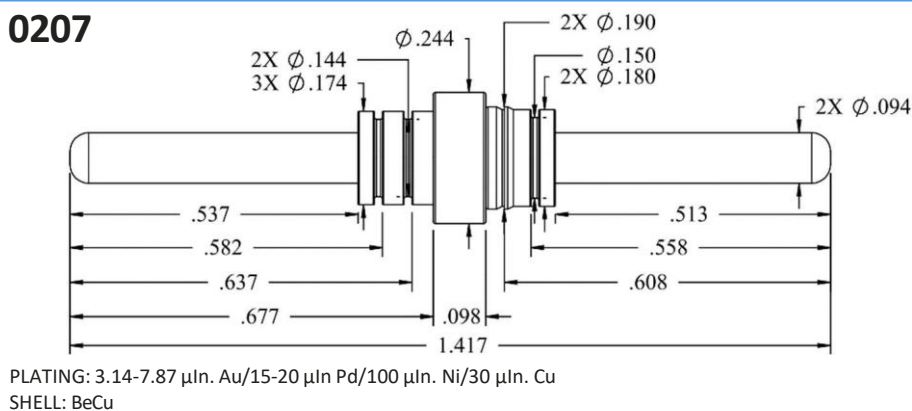
0204



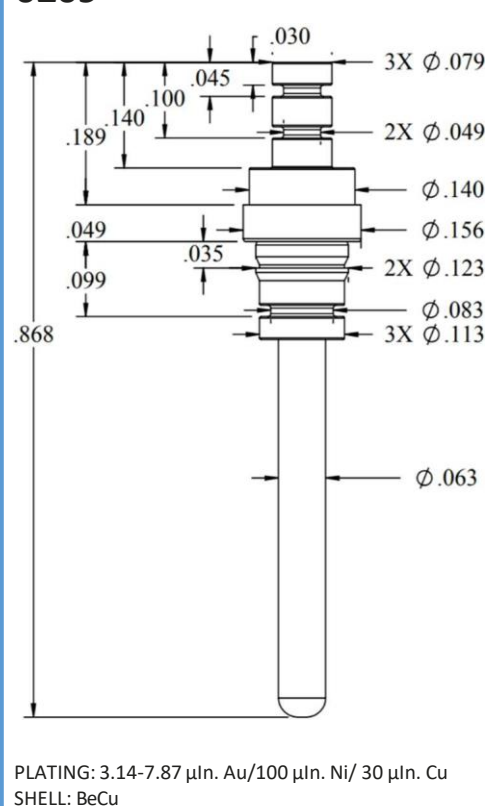
0206



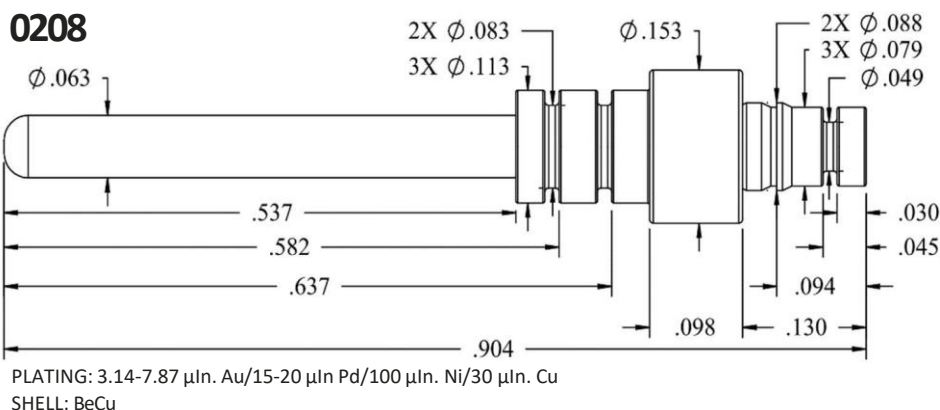
0207



0209



0208



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10 μ In. Min. over Nickel, 100 μ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200 μ In. Min. over Nickel 100 μ In. Min.

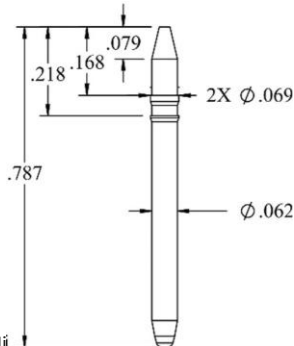
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:
LENGTHS $\pm .005$
DIAMETERS $\pm .002$
ANGLES $\pm 2^\circ$

DRAWINGS NOT TO SCALE

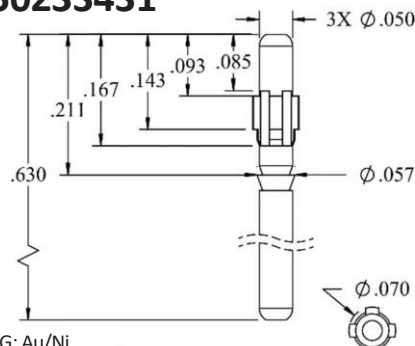


0213



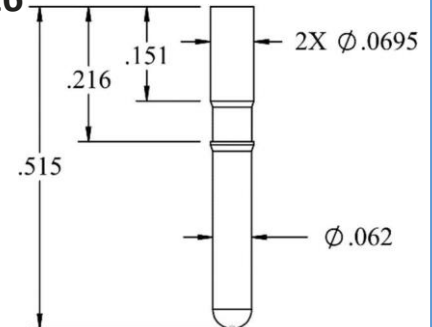
PLATING: Au/Ni
SHELL: BeCu

PH50233431



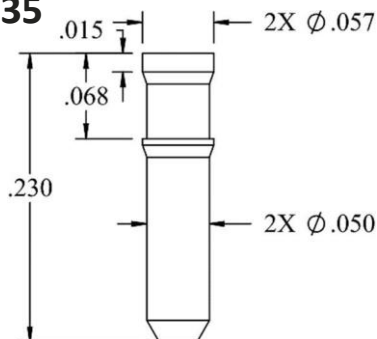
PLATING: Au/Ni
SHELL: BeCu

0216



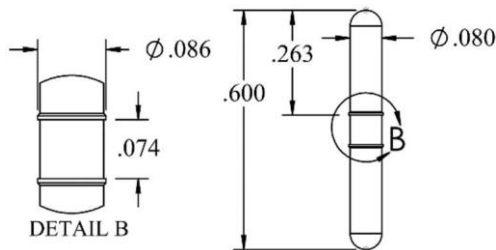
PLATING: Au/Ni
SHELL: Tellurium Copper Alloy C14500

0235



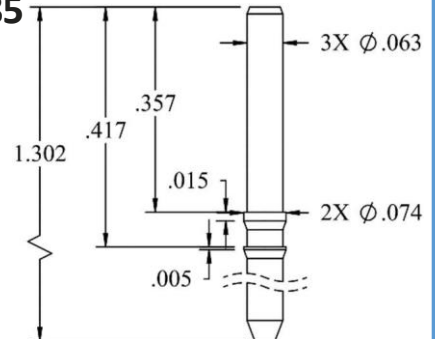
PLATING: 118 μ Sn/50 μ Ni
SHELL: BeCu

0256



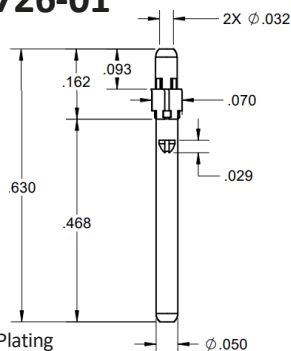
PLATING: Sn/Ni
SHELL: BeCu

0285



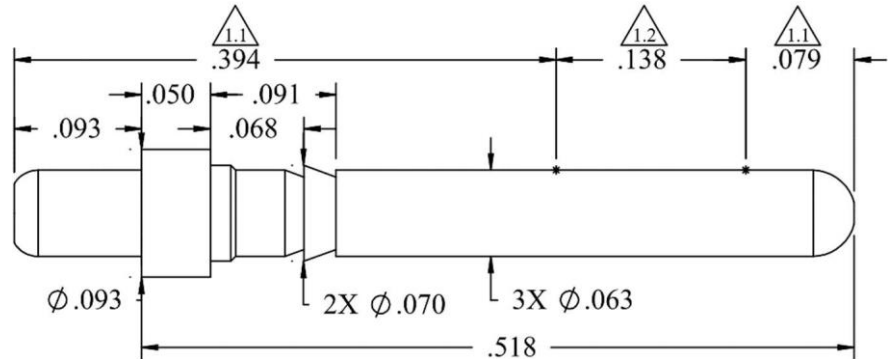
PLATING: Au/Ni
SHELL: BeCu

50-164726-01



PLATING: No Plating
SHELL: BeCu

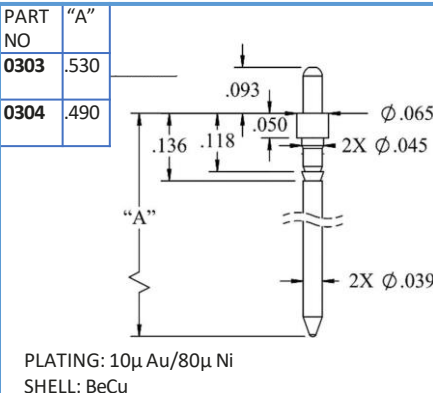
0305



PLATING: Select Gold Plating

SHELL: 1.1 130 μ In Sn/100 μ In Ni

1.2 30 μ In Au/100 μ In Ni



PLATING: 10 μ Au/80 μ Ni
SHELL: BeCu

NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

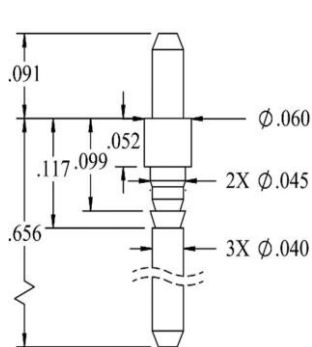
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10 μ In. Min. over Nickel, 100 μ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200 μ In. Min. over Nickel 100 μ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:
LENGTHS $\pm .005$
DIAMETERS $\pm .002$
ANGLES $\pm 2^\circ$

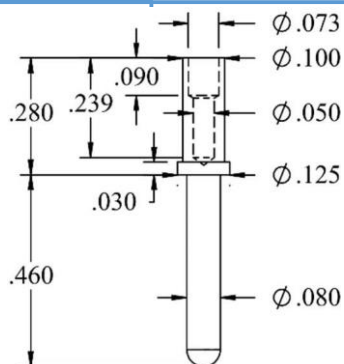
DRAWINGS NOT TO SCALE

0308



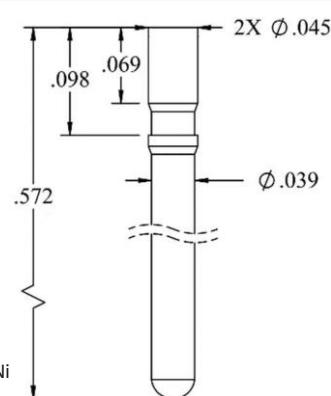
PLATING: 118 μ Sn/50 μ Ni SHELL: BeCu

0310



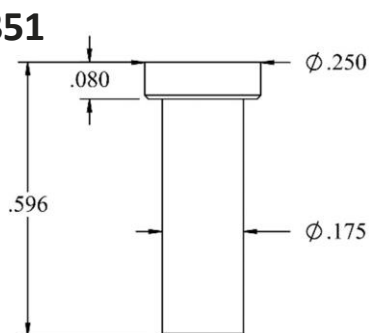
PLATING: Sn/Ni
SHELL: BeCu

0343



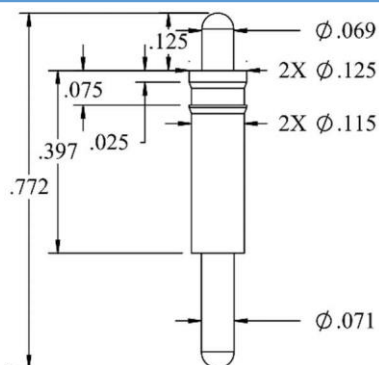
PLATING: Au/Ni
SHELL: BeCu

0351



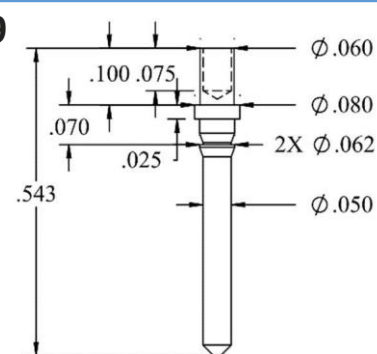
PLATING: None
MATERIAL: UNS S42000 Stainless Steel

0358



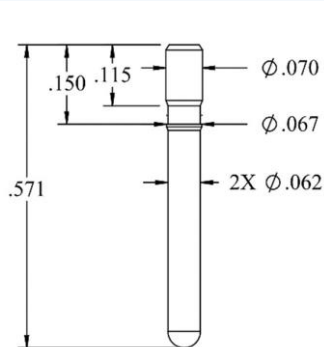
PLATING: Sn/Ni
SHELL: BeCu

0369



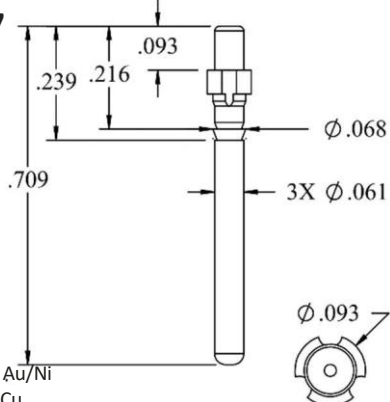
PLATING: 200 μ Ni
SHELL: BeCu

0397



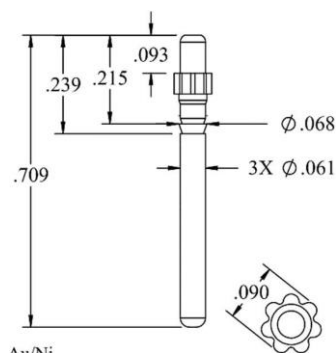
PLATING: Au/Ni
SHELL: Tellurium Copper Alloy C14500

0407



PLATING: Au/Ni
SHELL: BeCu

0408



PLATING: Au/Ni
SHELL: I

NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10 μ In. Min. over Nickel, 100 μ In. Min. per QQ-N-290 Class

4. Or Tin per MIL-T-10727 Type I, 200 μ In. Min. over Nickel 100 μ In. Min.

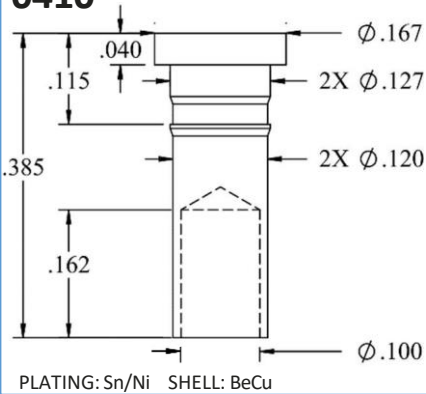
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

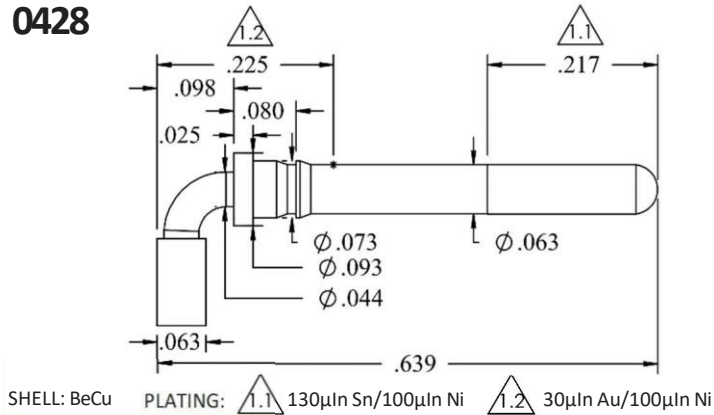
LENGTHS	DIAMETERS	ANGLES
$\pm .005$	$\pm .002$	$\pm 2^\circ$

DRAWINGS NOT TO SCALE

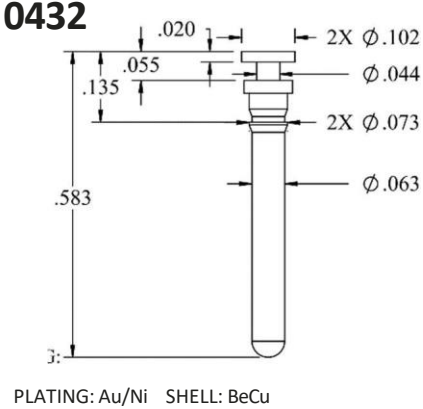
0410



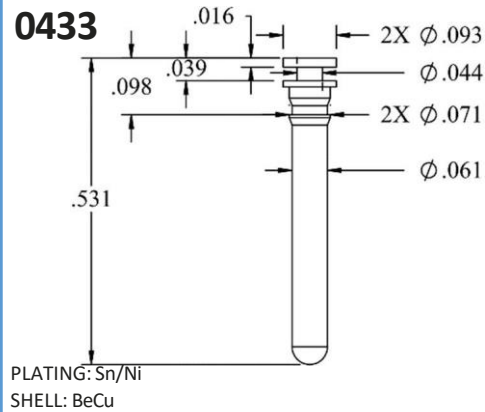
0428



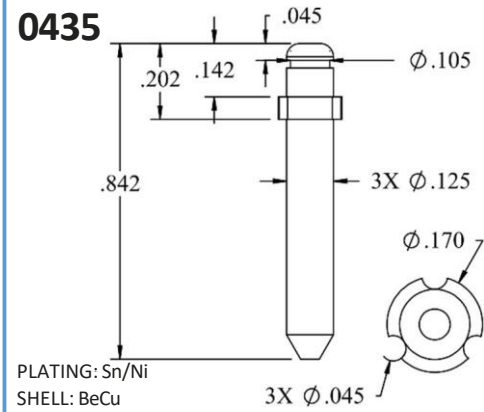
0432



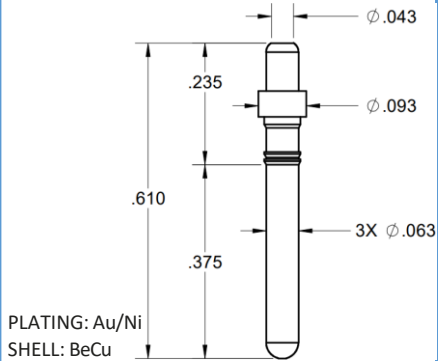
0433



0435



PH50188660



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

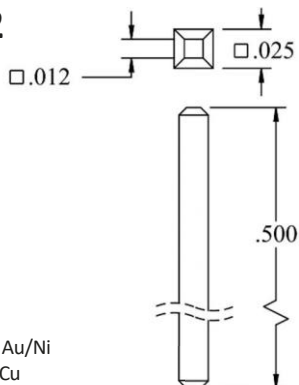
BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10 μ In. Min. over Nickel, 100 μ In. Min. per QQ-N-290 Class 4. Or Tin per MIL-T-10727 Type I, 200 μ In. Min. over Nickel 100 μ In. Min.

DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:
LENGTHS $\pm .005$ DIAMETERS $\pm .002$ ANGLES $\pm 2^\circ$

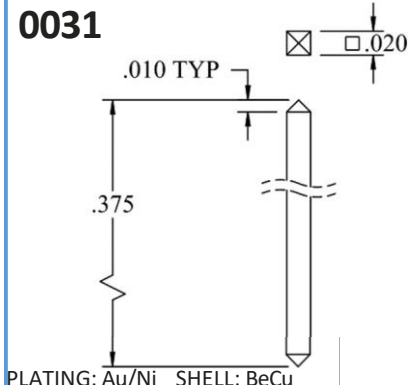
DRAWINGS NOT TO SCALE

0202



PLATING: Au/Ni
SHELL: BeCu
MATERIAL: CDA 510 PHOSPHOR BRONZE

0031



PLATING: Au/Ni SHELL: BeCu

NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C36000 per ASTM-B16, Half Hard plated Gold per MIL-G-45204 Type 2, Grade C, 10μ In. Min. over Nickel, 100μ In. Min. per QQ-N-290 Class

4. Or Tin per MIL-T-10727 Type I, 200μ In. Min. over Nickel 100μ In. Min.

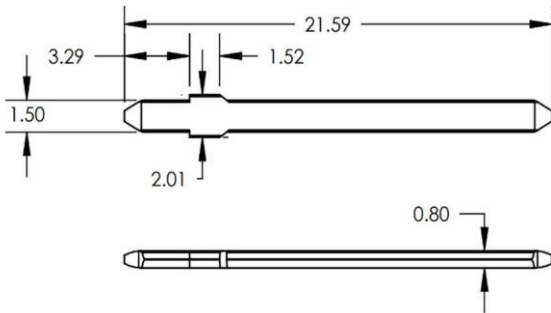
DIMENSIONS ARE IN INCHES

DIMENSIONAL TOLERANCES:

LENGTHS	DIAMETERS	ANGLES
±.005	±.002	±2°

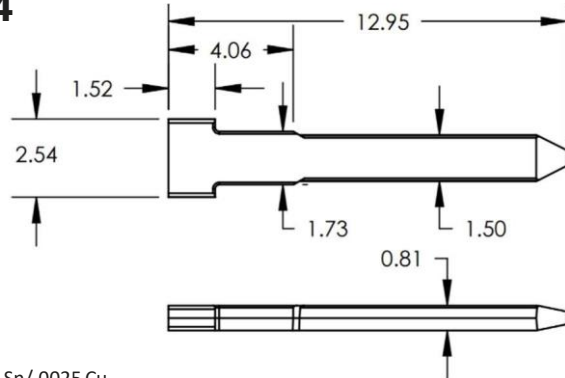
DRAWINGS NOT TO SCALE

0193



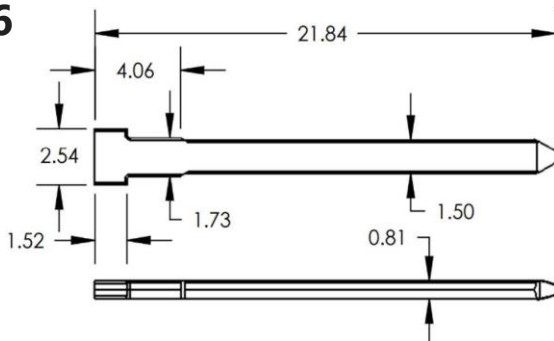
PLATING: Sn/Ni

0194



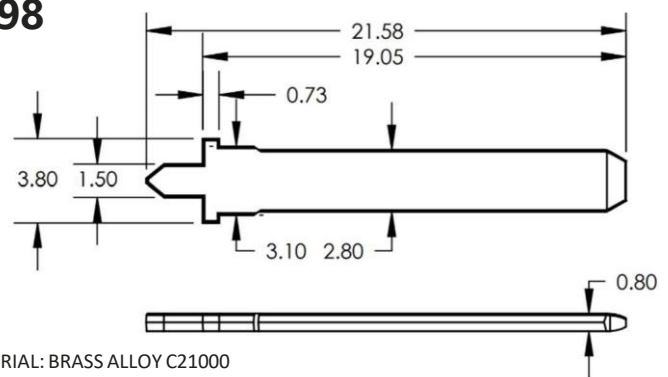
PLATING: Sn/.0025 Cu

0196



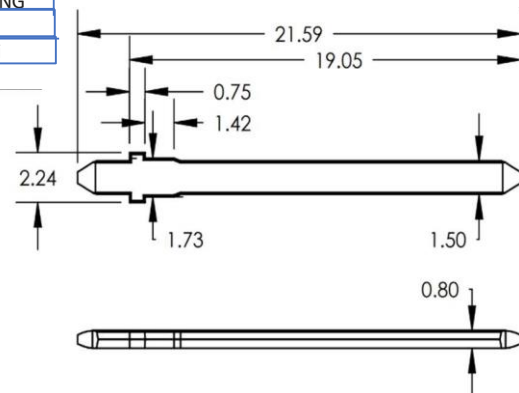
PLATING: Sn/.0025 Cu

0198

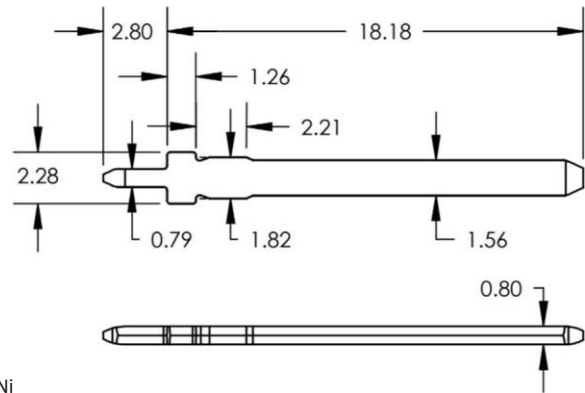


MATERIAL: BRASS ALLOY C21000
PLATING: Sn/Ni

PART NO.	PLATING
0229	Sn/Ni
0431	Au/Ni



0230



PLATING: Sn/Ni

NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

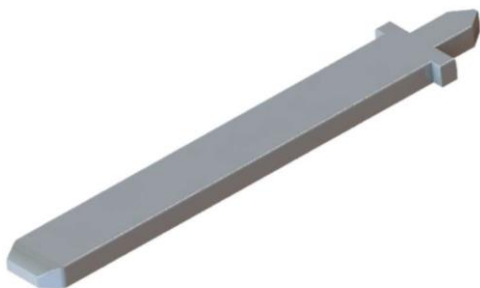
BRASS ALLOY C26000 per ASTM-B36, ¾ hard plated 0.0035 Electroplated Matte Tine over 0.0025 Nickel or plated 0.000254 Gold over 0.0025 Ni

Pins meet solderability requirements of IPC/EIA J-STD-002, Test A, Category 1

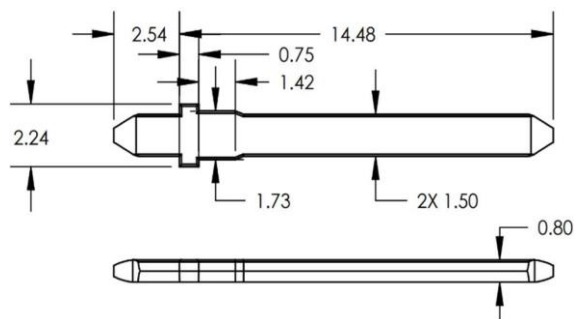
DIMENSIONS ARE IN
MILIMETERS
DIAMETERS
±.05

DIMENSIONAL TOLERANCES:
ANGLES
±2°

DRAWINGS NOT TO SCALE
LENGTHS
±.013

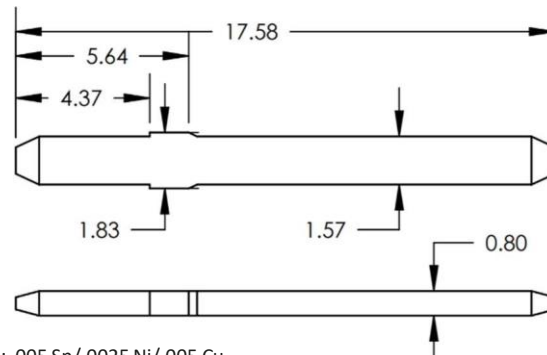


0231



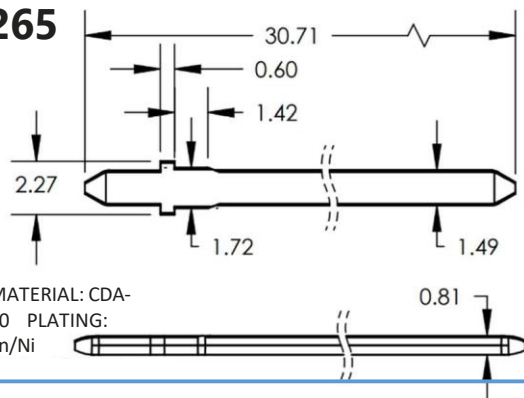
PLATING: Sn/Ni

0232



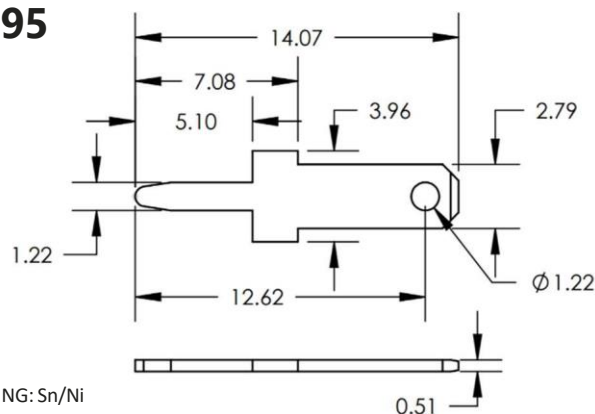
PLATING: .005 Sn/.0025 Ni/.005 Cu

0265



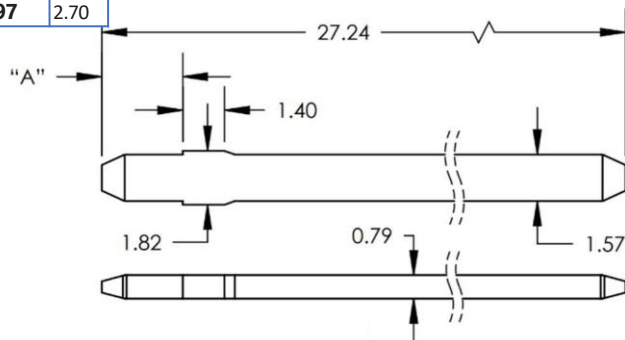
MATERIAL: CDA-20
PLATING: Sn/Ni

0295



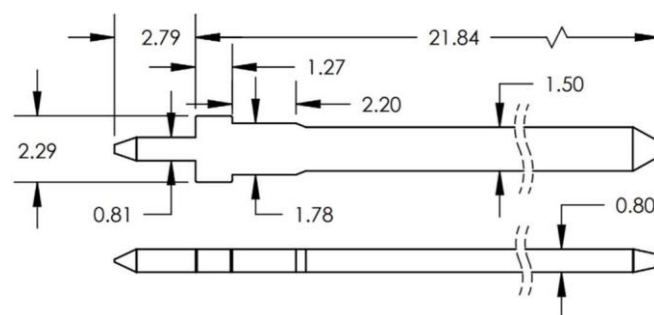
PLATING: Sn/Ni

PART NO	"A"
0296	3.55
0297	2.70



PLATING: 0.000762 Au/0.00127 Ni

PART NO	FINISH
0298	Sn/Ni
0299	.0005 Au/.0013 Ni



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C26000 per ASTM-B36, ¾ hard plated 0.0035 Electroplated Matte Tine over 0.0025 Nickel or plated 0.000254 Gold over 0.0025 Ni

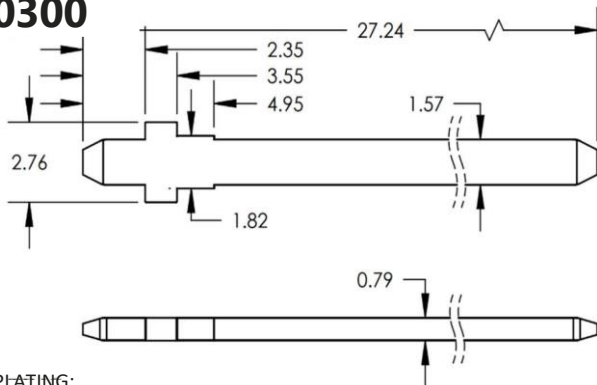
Pins meet solderability requirements of IPC/EIA J-STD-002, Test A, Category 1

DIMENSIONS ARE IN
MILIMETERS
DIAMETERS
±.05

DIMENSIONAL TOLERANCES:
ANGLES
±2°

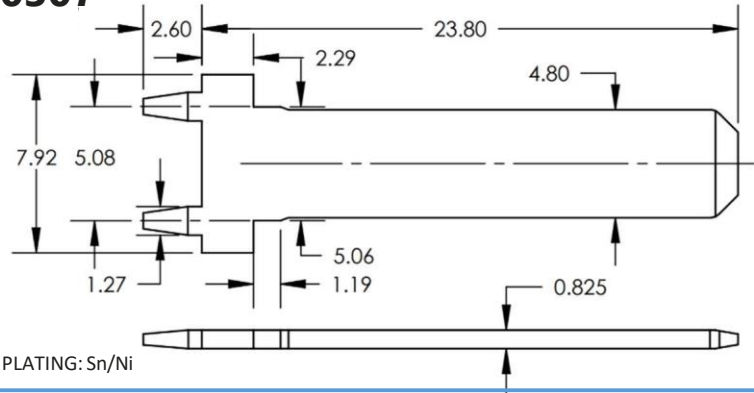
DRAWINGS NOT TO SCALE
LENGTHS
±.013

0300



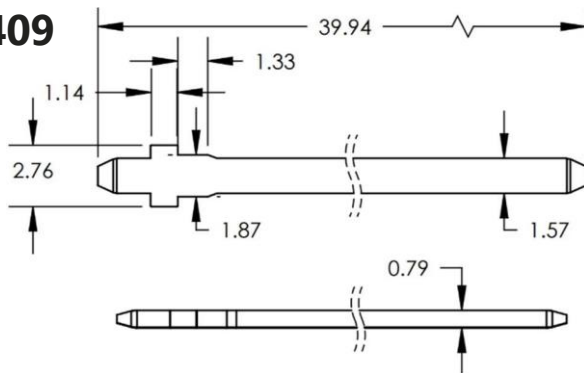
PLATING:

0307



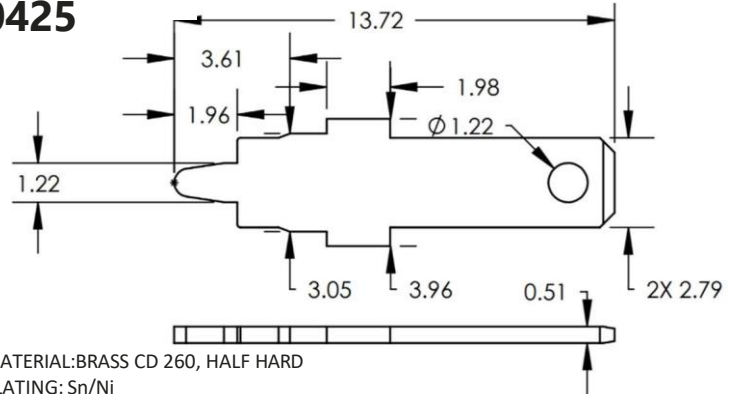
PLATING: Sn/Ni

0409



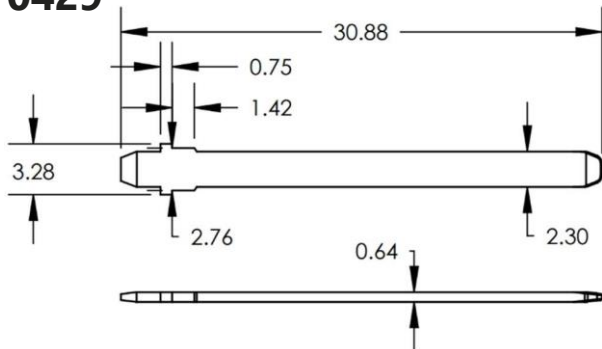
PLATING: Au/Ni/Cu

0425



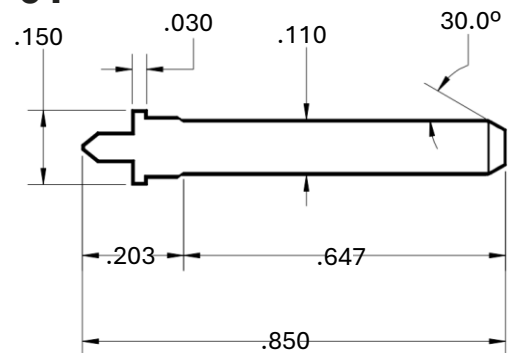
MATERIAL: BRASS CD 260, HALF HARD
PLATING: Sn/Ni

0429

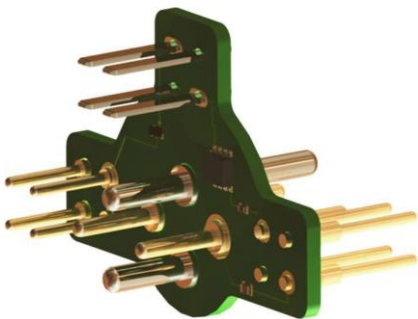


PLATING: Sn/Ni

50-161004-01



PLATING: Sn/Ni



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL / BODIES

MATERIAL \ FINISH

BRASS ALLOY C26000 per ASTM-B36, ¾ hard plated 0.0035 Electroplated Matte Tine over 0.0025 Nickel or plated 0.000254 Gold over 0.0025 Ni

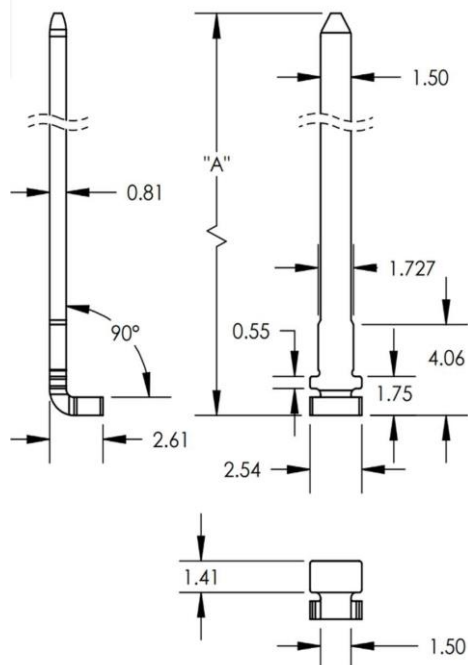
Pins meet solderability requirements of IPC/EIA J-STD-002, Test A, Category 1

DIMENSIONS ARE IN
MILIMETERS
DIAMETERS
±.05

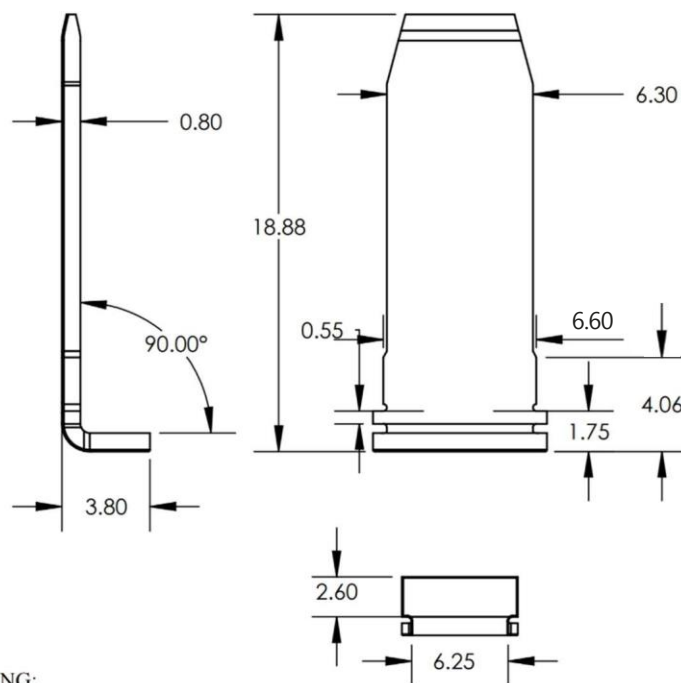
DIMENSIONAL TOLERANCES:
ANGLES
±2°

DRAWINGS NOT TO SCALE
LENGTHS
±.013

PART NO	"A"	FINISH
0266	21.84	Au/Ni
0277	21.84	Sn/Ni
0279	16.55	Sn/Ni
0278	12.95	Sn/Ni
0434	12.95	Au/Ni
0430	18.01	Sn/Ni/Cu

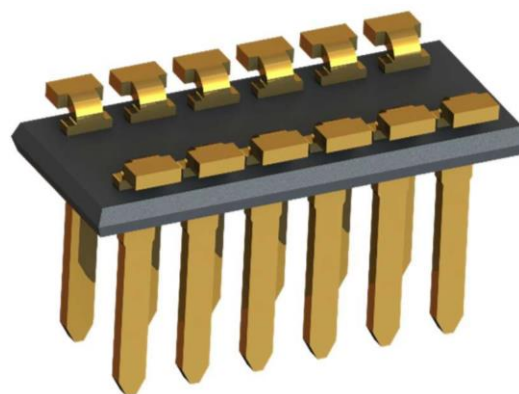


0426



PLATING:

PLATING: Sn/Ni/Cu



NOTES: UNLESS OTHERWISE SPECIFIED

SHELL /

BODIES

MATERIAL \

FINISH

BRASS ALLOY C26000 per ASTM-B36, ¾ hard plated 0.0035 Electroplated Matte Tine over 0.0025 Nickel or plated 0.000254 Gold over 0.0025 Ni Pins meet solderability requirements of IPC/EIA J-STD-002, Test A, Category 1

DIMENSIONS ARE IN
MILIMETERS

LENGTHS
±.013

DIMENSIONAL
TOLERANCES:

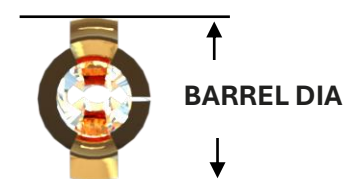
DIAMETERS
±.05

DRAWINGS NOT TO
SCALE

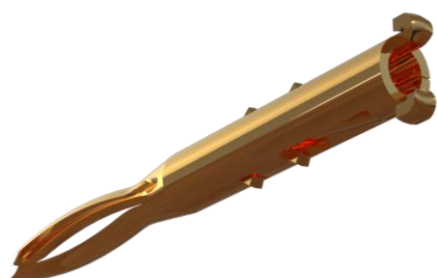
ANGLES
±2°



PART NUMBER	FINGER CONTACT	BARREL DIAMETER (in)	OVERALL LENGTH (in)	TEST PIN	MAXIMUM INSERTION FORCE	MINIMUM WITHDRAWAL FORCE
838	4	0.053	0.315	.017 DIA	165 GM	45 GM
839	3	0.034	0.300	.018 DIA	25 Gm	10 GM
840	3	0.034	0.262	.018 DIA	25 GM	10 GM
23	3	0.034	0.285	.018 DIA	25 GM	10 GM
57	3	0.028	0.300	.012 SQ .014 DIA	42 GM	10 GM
37	3	0.028	0.220	.012 SQ .014 DIA	42 GM	10 GM
14	3	0.028	0.180	.012 SQ .014 DIA	42 GM	10 GM
11	3	0.028	0.250	.012 SQ .014 DIA	42 GM	10 GM



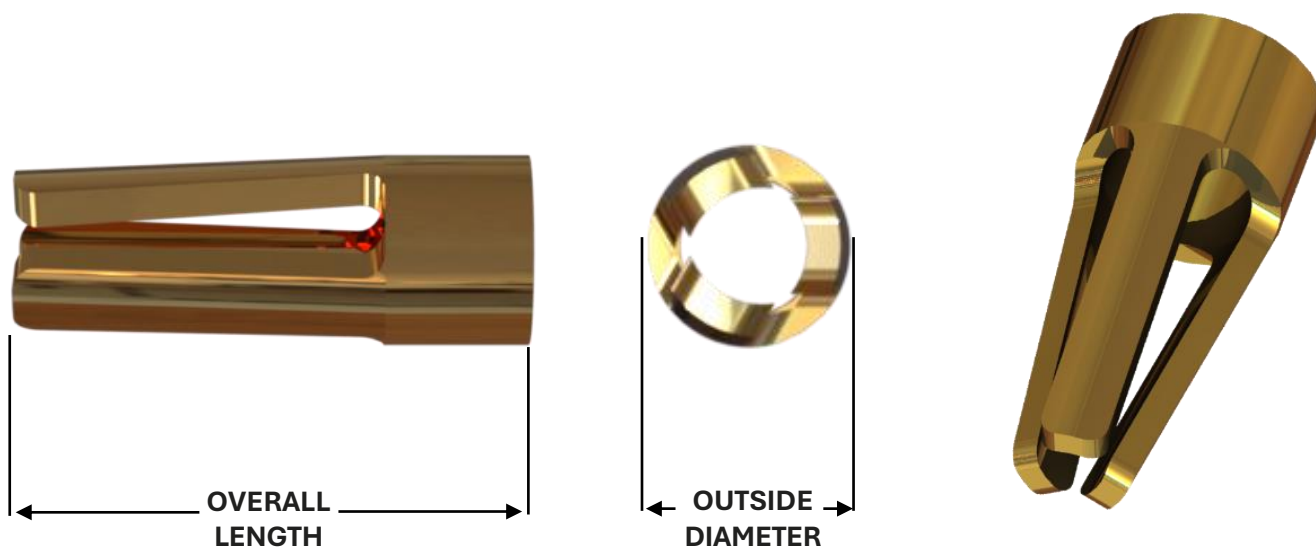
PART NUMBER	FINGER CONTACT	BARREL DIAMETER (in)	OVERALL LENGTH (in)	TEST PIN	MAXIMUM INSERTION FORCE	MINIMUM WITHDRAWAL FORCE
0437	2	0.035	.293	.012 DIA	42 GM	10 GM



NOTES: UNLESS OTHERWISE SPECIFIED

CONTACTS MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194, heat treated, plated Gold per MIL-G-45204 Type 2, Grade C, Class 0, 30μIn. Min. or Class 00, 10μIn. Min., over Nickel per QQ-N-290 Class 4, 50μIn. Min.
Or; Tin per MIL-T-10727 Type I, 200μIn. Min over Nickel, 50μIn.



PART NUMBER	OUTSIDE DIAMETER (in)	OVERALL LENGTH (in)	OPERATING RANGE PIN DIA. (in)	TEST PIN DIAMETER (in)	MAXIMUM INSERTION FORCE	MINIMUM REMOVAL FORCE
94	0.031	0.075	.015-.020	0.017	80 GM	15 GM
823	0.031	0.075	.015-.021	0.018	90 GM	14 GM
203	0.032	0.05	.015-.018	0.017	400 GM	100 GM
132	0.031	0.075	.015-.020	0.017	42 GM	14 GM
286	0.031	0.075	.015-.021	0.018	30 GM	10 GM
462	0.0235	0.065	.007-.013	0.011	30 GM	9 GM
311	0.0196	0.053	.006-.011	0.008	30 GM	10 GM

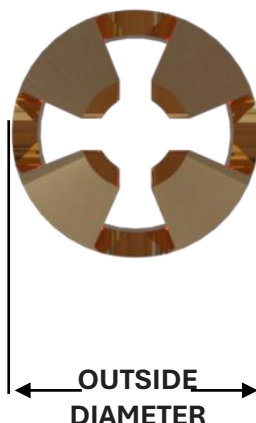
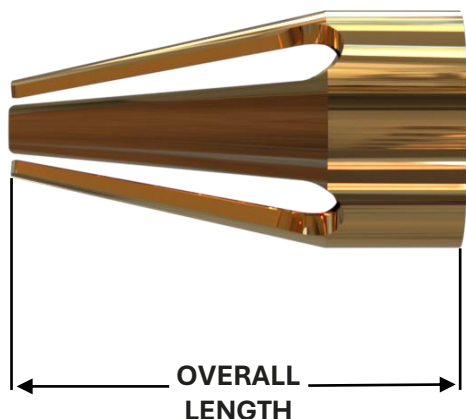


NOTES: UNLESS OTHERWISE SPECIFIED

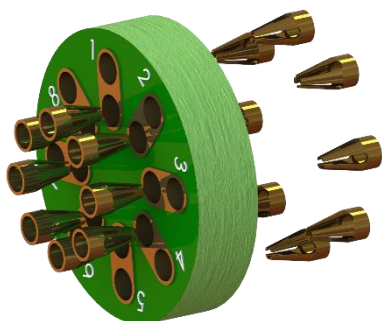
CONTACTS

MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194, heat treated, plated Gold per MIL-G-45204 Type 2, Grade C, Class 0, 30µIn. Min. or Class 00, 10µIn. Min., over Nickel per QQ-N-290 Class 4, 50µIn. Min.
Or; Tin per MIL-T-10727 Type I, 200µIn. Min over Nickel, 50µIn.



PART NUMBER	OUTSIDE DIAMETER (in)	OVERALL LENGTH (in)	OPERATING RANGE PIN DIA. (in)	TEST PIN DIAMETER (in)	MAXIMUM INSERTION FORCE	MINIMUM WITHDRAWAL FORCE
42	0.044	0.065	.015-.022	0.018	135 GM	25 GM
822	0.044	0.065	.015-.022	0.018	260 Gm	55 GM
824	0.044	0.065	.015-.022	0.018	520 GM	120 GM
825	0.044	0.083	.015-.022	0.018	45 GM	15 GM
137	0.044	0.083	.015-.025	0.017	270 GM	90 GM
826	0.044	0.083	.015-.025	0.018	675 Gm	200 GM
827	0.053	0.117	.022-.032	I - 0.026 W - 0.024	385 GM	50 GM
828	0.069	0.15	.036-.050	0.040 / 0.030	325 GM / 55 GM	60 GM / 15 GM
291	0.08	0.15	.040-.059	I - 0.05 W 0.04	375 GM	35 GM
829	0.064	0.095	.032-.045	0.04	5 LB	200 GM
830	0.0635	0.12	.032-.046	0.041 / 0.039	350 GM	55 GM
831	0.064	0.12	.032-.045	I - 0.04 W - 0.035	2.25 LB	110 GM
365	0.088	0.124	.048-.064	I - 0.06 W - 0.05	440 GM	60 GM
292	0.108	0.148	.065-.082	I - 0.074 W - 0.072	3 LB	230 GM



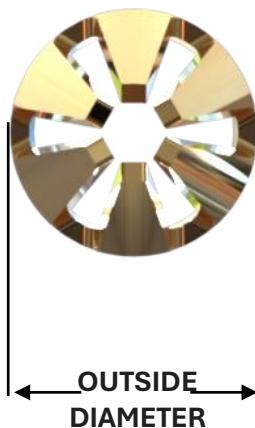
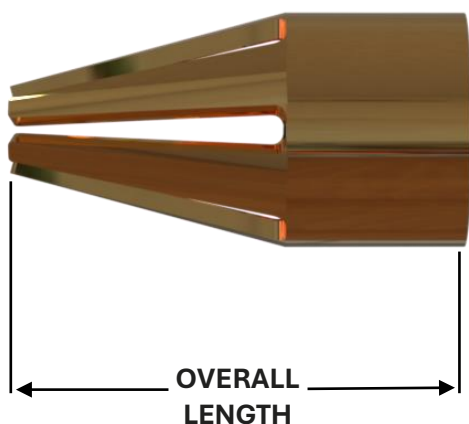
NOTES: UNLESS OTHERWISE SPECIFIED

CONTACTS

MATERIAL \ FINISH

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Or; Tin per MIL-T-10727 Type I, 200µIn. Min over Nickel, 50µIn.



PART NUMBER	OUTSIDE DIAMETER (in)	OVERALL LENGTH (in)	OPERATING RANGE PIN DIA. (in)	TEST PIN DIAMETER (in)	MAXIMUM INSERTION FORCE	MINIMUM WITHDRAWAL FORCE
309	0.028	0.06	0.012 - 0.017	0.015	250GM	42GM
452	0.031	0.06	0.012-0.019	0.015	60GM	15GM
832	0.044	0.062	0.015-0.023	0.017	150GM	40GM
833	0.044	0.062	0.015-0.023	0.017	120GM	20GM
834	0.044	0.083	0.015-0.026	0.017	90GM	25GM
329	0.044	0.083	0.015-0.026	0.018	42GM	15GM
835	0.044	0.083	0.015-0.026	0.018	20GM	10GM
284	0.05	0.083	0.025-0.035	0.026	140GM	25GM
836	0.052	0.083	0.025-0.037	0.026	375GM	100GM
837	0.052	0.083	0.025-0.037	0.026	125GM	40GM
366	0.055	0.065	0.037-0.043	0.04	160GM	50GM
455	0.068	0.085	0.04-0.05	0.04	300GM	75GM
457	0.1235	0.12	0.084-0.102	0.093	600GM	150GM

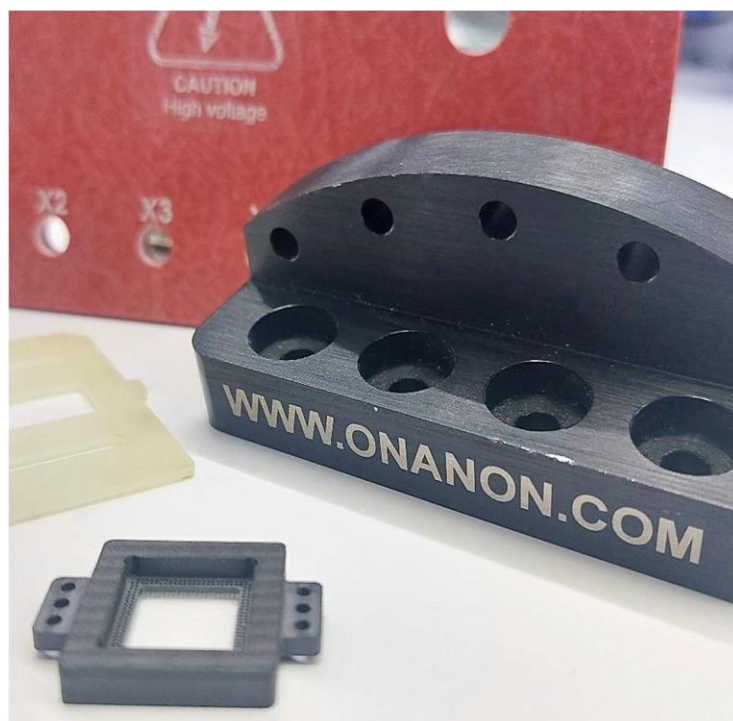
NOTES: UNLESS OTHERWISE SPECIFIED

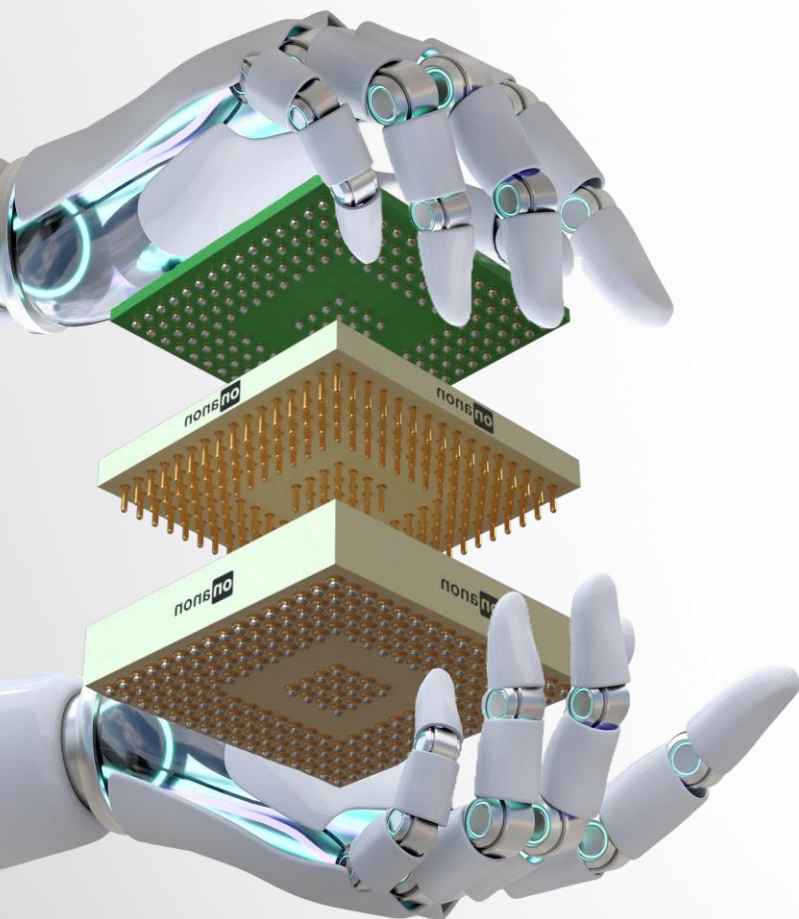
CONTACTS MATERIAL \ FINISH

Beryllium Copper, Alloy C17200 per ASTM-B194, heat treated, plated Gold per MIL-G-45204 Type 2, Grade C, Class 0, 30µIn. Min. or Class 00, 10µIn. Min., over Nickel per QQ-N-290 Class 4, 50µIn. Min. Or; Tin per MIL-T-10727 Type I, 200µIn. Min over Nickel, 50µIn.

ABS – Acrylonitrile Butadiene Styrene	MC® 907 Natural
Acetal	Meldin®
Acetron GP	Micarta®
Acetate	Mylar®
Acrylic	Nylatron® GS
Celazole	Nylatron GM Blue
Celcon® – Acetac Co-Polymer	Nylatron GSM
Cellulose Acetate	Nylon 101
Cirlex®	Nylon 6/6
Copper Clad Laminates	Orkot®
CPVC – High Temperature PVC	Phenolic
Delrin®	Line Phenolic
Delrin® Acetal	Paper Phenolic
Delrin® AF Blend	PC 1000 Polysulfone
Duratron® 150	PET
Duratron® XP	Plexiglas®
Ertalyte® PET-P	Polycarbonate
Ertalyte® TX	Polyimide
FEP – Fluorinated Ethylene Propylene	Polyphthalamide
Fluoroglas®	Polypropylene
Fluorosint® 207 PTFE	Polyshell – 01 (Virgin PTFE)
Fluorosint® 500 PTFE	Polyshell – 02 (Premium PTFE Blue)
FR-4 / IPC-4101	Polyshell – 03 (Graphite Filled PTFE)
G10	Polyshell – 04 (Carbon/Graphite Filled PTFE)
G11	Polyshell – 05 (Carbon/Graphite Filled PTFE)
Haylar®	Polyshell – 06 (Glass/Moly Filled PTFE)
HDPE (High Density Polyethylene)	Polyshell – 07 (Glass/Moly Filled PTFE)
Hydar®	Polyshell – 08 (UHMWPE)
Kapton®	Polyshell – 09 (Filled PTFE)
Kel-F® (Polychlorotrifluoroethylene)	Polyshell – 10 (Filled PTFE)
Ketron® PEEK HPV	Polyshell – 11 (Premium PTFE White FDA)
Ketron® PEEK 1000	Polyshell – 12 (Virgin PEEK)
Ketron® PEEK 30% Glass Filled	Polyshell – 13 (Glass Filled PTFE)
Ketron® PEEK CA30	Polystyrene
Ketron® PEEK HT	Polysulfone
Kydex®	Polyurethane
Kynar®	PVC (Polyvinylchloride)
LCP	Radel R
LDPE (Low Density Polyethylene)	Rexolite®
Lexan®	Rulon® LR
MC® 901 Blue	

Rulon® J	Tuffak® – Polycarbonate
Ryton® PPS 40% Glass Filled	Turcite®
Ryton® PPS Bearing Guide	Tygon®
Santoprene	UHMW – Ultra High Molecular Weight
Semitron® ESD 225	Ultem 1000
Semitron® ESD 410C	Ultem 2300
Semitron® ESD 520 HR	Vespel® SP-1
Silicone	Vespel® SP-21
Techtron® HPV	Vespel® SP -211
Techtron® PPC	Vespel® SP-22
Techtron CM PPS	Vespel® SP-3
Teflon®	Vespel® TP-2236
Teflon® Glass Filled	Vespel® TP-2875
Teflon® Graphite Filled	Vespel® TP-8311
Teflon® Bronze Filled	Vespel® CR-6100
Teflon® Molybdenum Disulfide Filled	Vespel® CR-6200
Tefzel®	Vespel® CR-6300
Torlon® 4203	Vespel® CR-6500
Torlon® 4301	Vespel® CP-8000
Torlon® 4501	Vespel® CP-8001
Torlon® 4503	Vespel® CP-8002
Torlon® 5530	Vespel® ABS-5000
Tivar®	Zelux®
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