



Chassis Control Electric Power Steering (BLDC Motor Drive)



ALUMINUM CAPACITORS

SMD Aluminum Capacitors, High Temperature Up to 150 °C, Low ESR



- High ripple current up to 1400 mA at 150 °C, capacitance up to 3300 μ F
- Useful life up to 2000 h at 150 °C, high vibration capability

[260 CLA-V](#)

RESISTORS

Thin Film Resistors, 1.0 Ω to 3.01 M Ω , 020 to 1210 Case Sizes, 25 V to 200 V



- Superior moisture resistivity (85 °C; 85 % RH)
- Excellent overall stability at different environmental conditions $|R/R| \leq 0.05$ % after 1000 h at 70 °C
- Wide range of sizes and ohmic values

[TNPW e3](#)

MOSFETs

N-Channel MOSFETs in 5 mm x 6 mm PowerPAK ® , Rated at 40 V, 350 A, 1.24 m Ω



- AEC-Q101 qualified, 100 % UIS and RG tested with up to 175 °C operation
- Ultra-low RDS(on), thermally enhanced PowerPAK ® SO-8L replaces DPAK in less than half of the area

[SQJA36EP](#)

MOSFETs

N-Channel MOSFETs in 5 mm x 6 mm PowerPAK ® , 40 V, 330 A, 1.8 m Ω



- AEC-Q101 qualified
- Logic level V_{th}, low RDS(on), thermally enhanced PowerPAK ® SO-8L replaces DPAK in less than half of the area

[SQJ138EP](#)

RESISTORS

Precision Thin Film Chip Resistor Arrays, Superior Moisture Resistivity

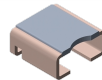


- Superior moisture resistivity, $|R/R| \leq 0.5$ % (85 °C; 85 % RH; 1000 h)
- Rated dissipation P70 up to 125 mW per resistor

[ACAS0612 AT Precision](#)

RESISTORS

Power Metal Strip ® SMD Resistors, 4-Terminal, Low Values, Low Value (down to 0.0002 Ω)



- High power rating of 3 W to 5 W with TCR = 20 ppm/K
- Very low resistance values, 0.0001 Ω to 0.004 Ω with tolerance of 1%

[WSK1216](#)

OPTOELECTRONICS

Triple Channel Transmissive Optical Sensor for "Turn and Push" Encoding



- Phototransistor outputs, SMD package, IC = 1.3 mA typical
- IR emitter and three phototransistor detectors, located face-to-face

[TCUT1630X01](#)

THERMISTORS

SMD Glass-Protected NTC Thermistors



- TCR ranging from -7 %/K at -40 °C to -2 %/K at 150 °C
- Tolerance on R25 down to 1 %, and on B25/85 down to 1 %
- Suitable for wave or reflow soldering

[NTCS...e3](#)

INDUCTORS

Low-Profile, High-Current IHLP ® Inductors

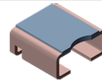


- High temperature, up to 155 °C
- Shielded construction

[IHLP-6767GZ-5A](#)

RESISTORS

Power Metal Strip ® Resistors, High Power Up to 7 W, Surface-Mount



- Very high power (7 W)
- Resistance = 0.3 m Ω to 4 m Ω

[WSLP2726](#)

CERAMIC CAPACITORS

AEC-Q200 Qualified, Broad Range of Sizes and Working Voltages, C0G (NPO), X7R, and X8R



- RoHS and Green compliant parts available
- AgPd termination available for epoxy bonding

[GA...31G Automotive MLCCs](#)

MOSFETs

N-Channel MOSFETs in 8 mm x 8 mm PowerPAK ® , Rated at 40 V, 575 A, 0.9 m Ω



- TrenchFET ® Gen IV power MOSFET
- AEC-Q101 qualified

[SQJQ144AE](#)

POWER RECTIFIERS

1 A FRED Pt® Hyperfast Rectifier



- Hyperfast recovery time, reduced Q_{rr} , and soft recovery
- 175 °C maximum operating junction temperature

[VS-1EFH02HM3](#)