



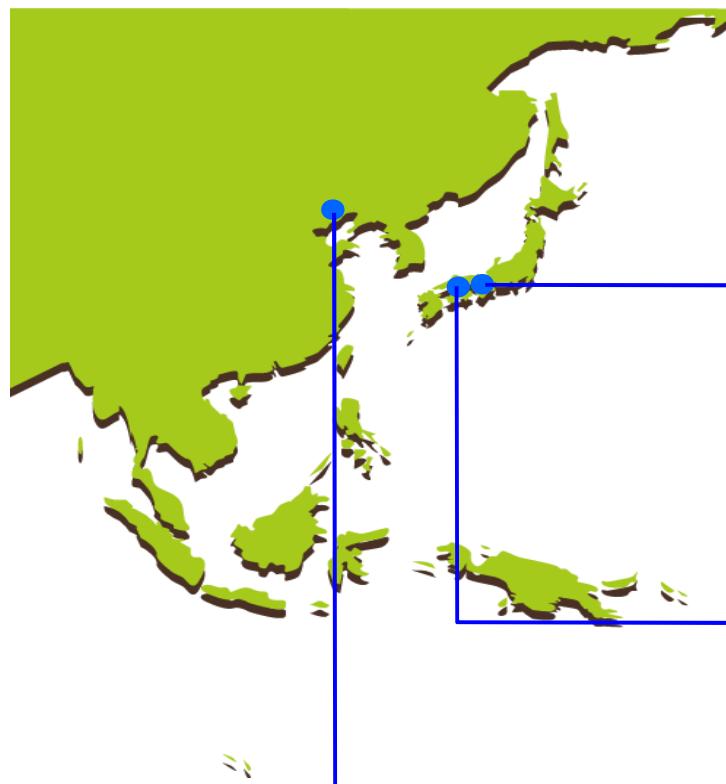
Laser Diode (LD) Lineups

Jun. 11, 2020
Optical module Business Unit
Photonics Div.
Product Development Dept. 1

Manufacturing Location Of ROHM LDs



- ✓ A quality control system is built by a continuous production from chips to finished products.
- ✓ ROHM commands and the larger share of LDs for CD/DVD playback, for laser printers, multi function printers and copiers and for sensors.



ROHM (Head Quarter·Kyoto)

Development (LD Chip, Package & Machine)
Quality Assurance
Production Control
Manufacturing Technique
Product Of LD Chips (FAB)
R & D

Chip is 100% made in ROHM own.

ROHM WAKO (Okayama)

ASSY & Inspection

Rohm Semiconductor China (Tianjin)

ASSY & Inspection

All manufacturing equipment is designed in ROHM own.

LD Lineups for sensor, leveling, ranging and etc.



Main new product are high power IR LDs for motion sensing and ranging

λ Power	630-640 nm	650-670nm	780-800nm	800-950nm		
>1W		PM2.5 Detect (Air Conditioner)				
100-500mW	Leveling 		General sensor 	RLD82NZJ1 RLD82PZJ1	RLD84NZJ2 RLD84PZJ2	RLD85NZJ4 RLD85PZJ4
20mW	RLD63NPC8 50°C 	RLD78NZM7 RLD78MZM7 RLD78PZM7 				RLD94NPZJ5 RLD94NPZJ7
15mW	RLD63NPC7 50°C 				Motion sensing 	
9-12mW	RLD63NPC6 50°C 	RLD65PZX3 	RLD78NZM5 			
\sim 5mW	RLD63PZCA 50°C RLD63NZCA 50°C 	RLD65NZX2 RLD65PZX2 	RLD78MZA6 Multi-mode 			

Ranging for longer distance

RLD90QZW* 25~120W

Interactive projector (Laser Curtain)

Package
shown by the seventh character from the left of the name

Mark	Package	Mark	Package
Z	5.6φ 3Pin With glass W	N	5.6φ 4Pin With glass W
P	5.6φ 3Pin Without glass W		

Polarity
shown by the sixth character from the left of the name

Mark	LD common	PD common
M	cathode	cathode
N	anode	cathode
P	cathode	anode
Q	cathode	No
S	floating	No

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Under development

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LD Lineups for laser printer, MFP & copier



All LDs for laser printer, MFP & copier are the custom specification items. It might be possible to customize for each specification request, lasing wavelength, polarity and output power, beam pitch and etc. Please contact Product development dept. through the sales dept., if you have any opportunity.

Number of Beams	5.6Φ 3Pin CAN	*resin package			5.6Φ 4Pin CAN	5.6Φ 6Pin CAN			
Power λ	650-670nm	780-800nm			650-670nm	780-800nm	780-800nm		
25mW					RLD2BPND2 30μm Pitch	RLD2BPN4 28μm Pitch	RLD2BPN5 30μm Pitch		
20mW			RLD78MZM7	RLD78NZM7	RLD78PZM7				
15mW	RLD65NZN7 (670nm)				RLD2BPND1 30μm Pitch	RLD2BPN3 14μm Pitch	RLD2BPNK2 28μm Pitch	RLD4BPMP2 28μm Pitch	RLD4BPPM5 30μm Pitch
10mW	RLD65NZN5	RLD65PZN5		RLD78NZM5	RLD78NRM8 *		RLD2BPNK5 28μm Pitch		
7mW						RLD2BPNK4 90μm Pitch			

Polarity

Shown by the sixth character from the left of the name

Mark	LD common	PD common
M	cathode	cathode
N	anode	cathode
P	cathode	anode

LD Lineups for optical pick up



All LDs for optical pick up are the custom specification items.

Please contact Product development dept. through the sales dept., if you have any opportunity.

λ Power	650-670nm For DVD	650-670 / 780-800nm 2wavelength For CD / DVD	780-800nm For CD
4.5-7mW	RLD65MFX1 Single mode High-temp. 80°C Flat resin flame 	RLD2WMFV2 Single mode Standard 75°C Flat resin flame 	RLD2WMFL3 Single mode High-temp. 80°C Flat resin flame 
	RLD2WMFR5 Self-pulsation Higher ESD/COD 70°C Flat resin flame 	RLD2WMNL2 Single mode High-temp. 90°C 5.6Φ4PinCAN with glass window 	RLD78MRA6 Multi mode Low-Iop 70°C 5.6Φ compatible flame 

Polarity

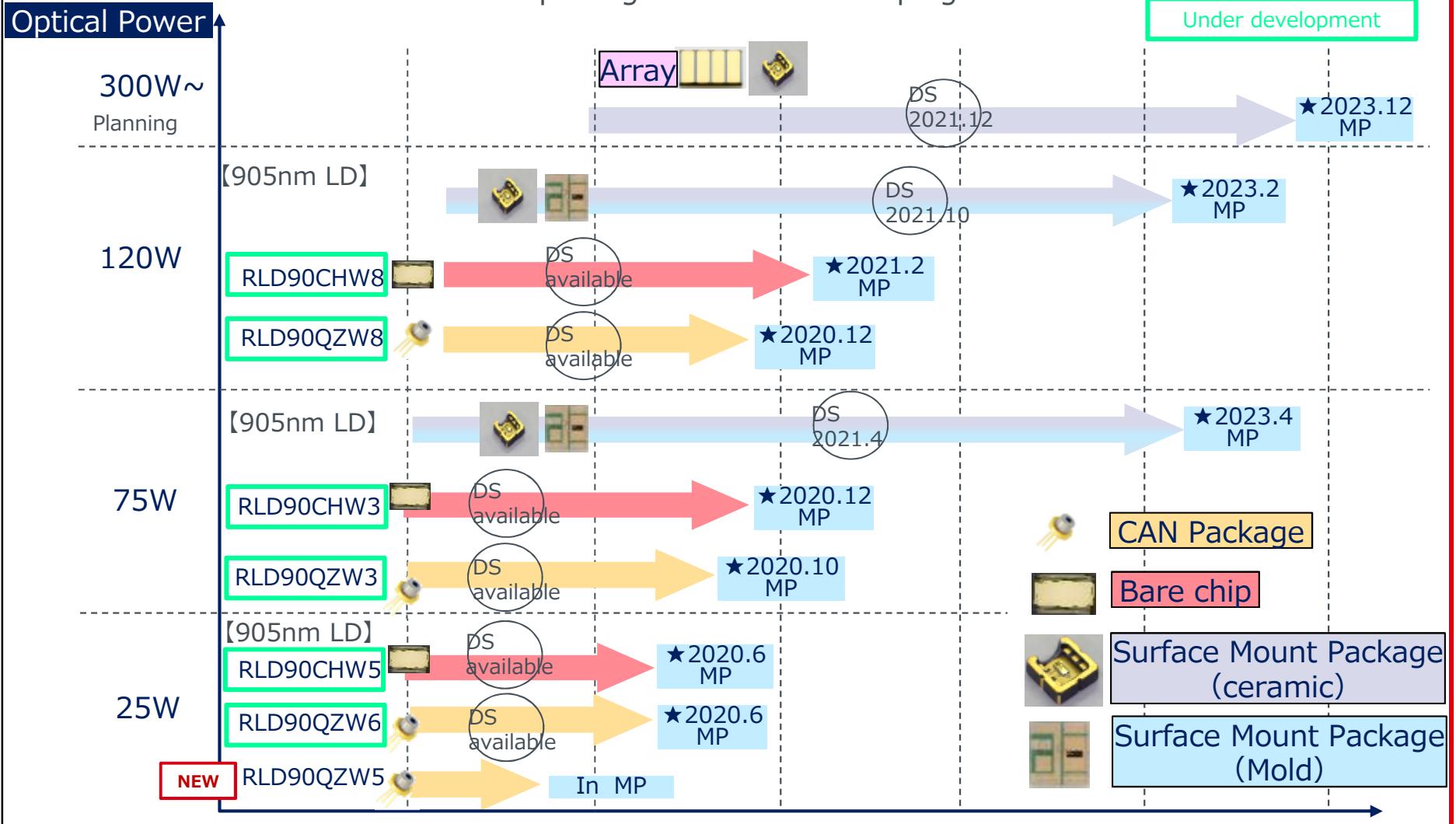
All LDs for OPU are PD/LD cathode common

Roadmap of the Laser Diode for LiDAR



✓ 25W LD (RLD90QZW5) for consumer and industrial products has been in series-production since Nov. 2019.

✓ Over 75W LDs and surface mount packages are now developing.

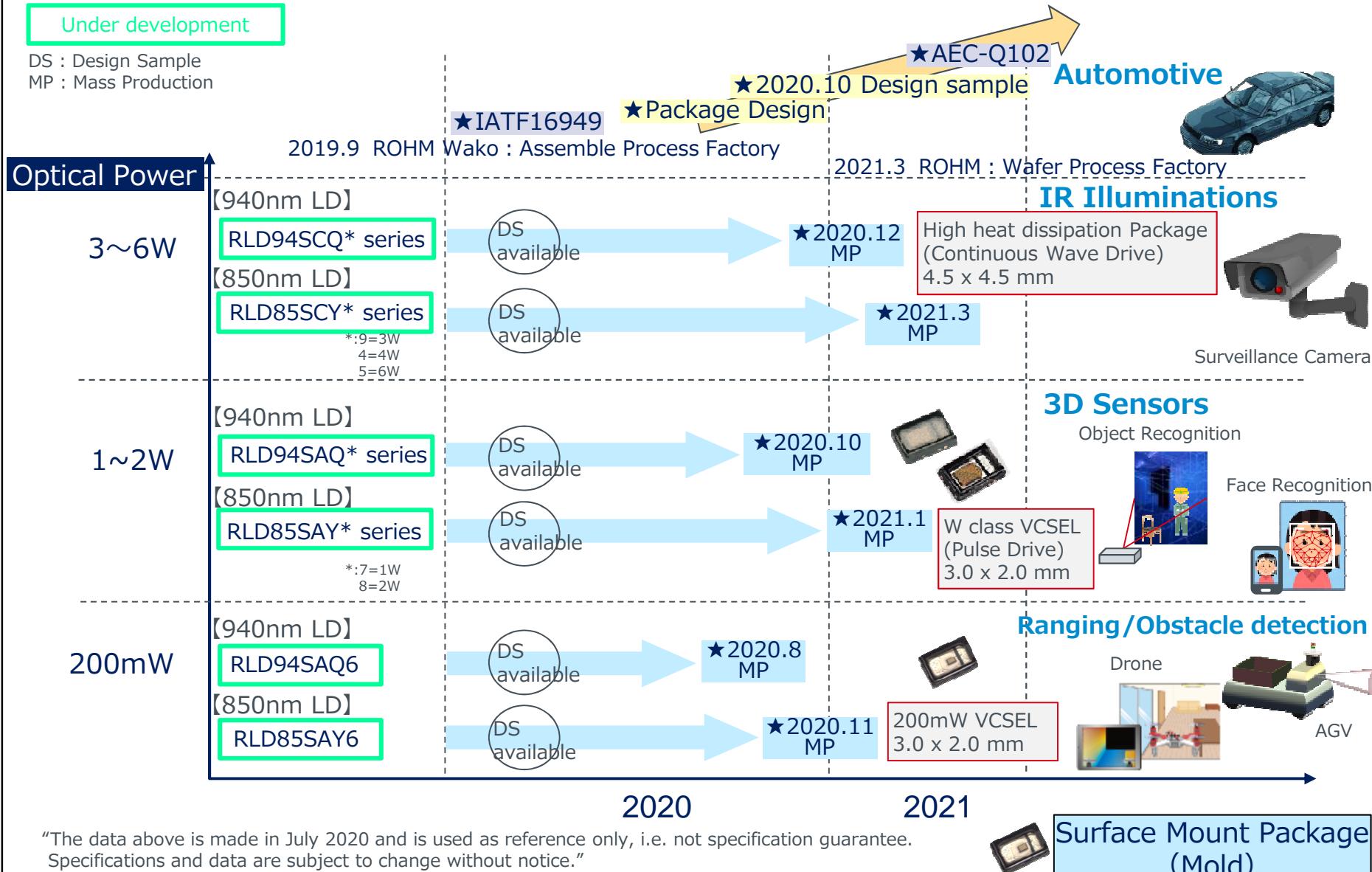


ROHM VCSEL Roadmap



Under development

DS : Design Sample
MP : Mass Production



"The data above is made in July 2020 and is used as reference only, i.e. not specification guarantee.
Specifications and data are subject to change without notice."



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