

Narrow Pitch Twin Beam Infrared Laser Diodes for Laser Printers

RLD2BPNK3



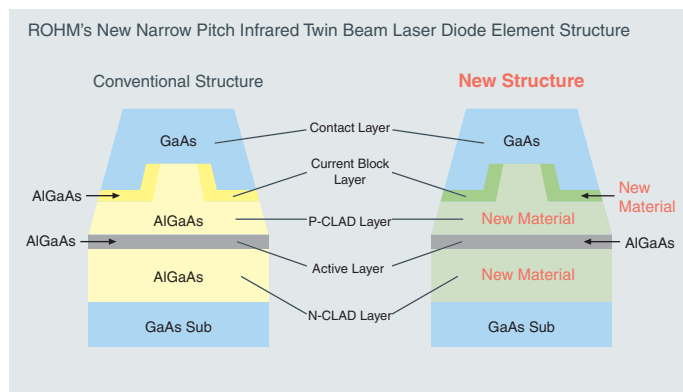
New materials utilized for narrow (28 μ m) pitch and superior temperature characteristics

Product outline

Conventional laser diodes with a narrow luminous point interval are susceptible to the thermal effects of neighboring components during operation, resulting in reduced performance. In answer to this ROHM has developed a dual-beam infrared laser diode that utilizes novel materials for excellent temperature characteristics, even with a narrow pitch (28 μ m).

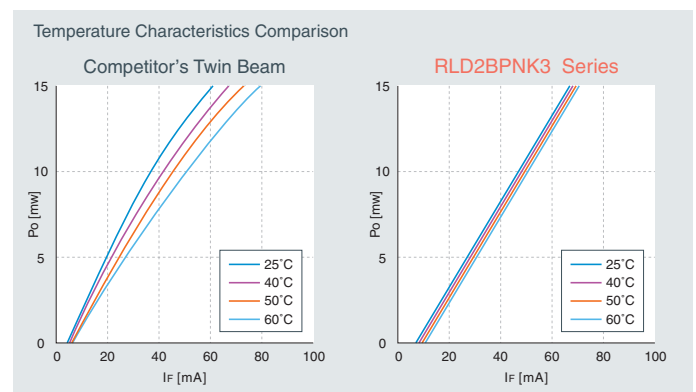
Original material technology

Proprietary construction prevents carrier overflow from the active layer (AlGaAs) during high temperature operation.



Twin beam with excellent temperature characteristics

The utilization of new materials result in a change in current of only 6% (at 6mW) when Tc increases from 25°C to 60°C. Lower droop characteristics are also ensured.

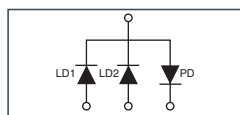


Specifications

Absolute Maximum Ratings (TC=25°C)

Symbol	Po	VR	Top Max.
Unit	mW	V	°C
Limits	10	2	-10 to +60

Equivalent Circuit



Electrical • Optical Characteristics (TC=25°C)

Symbol	Ith	Iop	Vop	η	Im	θ''	$\theta_{\perp L}$	λ	Beam Pitch
Unit	mA	mA	V	mW/mA	mA	deg	deg	nm	μ m
Typical	10	30	2.3	0.3	3.5	9	24	792	28

condition : Po=6mW

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