

Superluminescent Diode 1550nm 50mW



SLD-1550-9MM-50 double-pass superluminescent diode is a light source for fiber transmission systems, fiberoptic gyros, fiberoptic sensors, optical coherence tomography, optical measurements. The diode is packaged in standard 9mm TO can.

Key Features

- Optical output: 50mW
- Curved waveguide with a high-reflection rear facet and tilted AR-coated front facet

Optical and electrical characteristics: (T = 25°C)

Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Output Power	P_f			40	50	mW
Forward Voltage	V_F	$P_f=40\text{mW}$			2.5	V
Forward Current	I_F	$P_f=40\text{mW}$		450	500	mA
Center Wavelength	λ_c	$P_f=40\text{mW}$		1550		nm
Spectral Width	$\Delta\lambda$	$P_f=40\text{mW}$	20	25		nm
Monitor Current	I_m	$P_f=40\text{mW}, V_{RD}=5\text{V}$	40		500	μA
PD Dark Current	I_d	$V_{RD}=5\text{V}$			0.1	μA

Absolute Maximum Ratings

Item	Symbol	Rating	Unit
LD Forward Current	I_f	500	mA
LD Reverse Voltage	V_r	1.8	V
PD Reverse Voltage	V_{RD}	10	V
Operation Case Temperature	T_c	-40 to +70	°C
Storage Temperature	T_{stg}	-40 to +85	°C

PACKAGING

No.	FUNCTION
1	LD anode +
2	LD cathode -, PD anode - (case)
3	PD cathode +

