1310nm Super luminescent (SLD) Laser Diode 6 pin cooling



Description

HS-6312-0003 is a 1310nm super-luminescent light-emitting diode (SLD). It is used as an incoherent light source for various optical measurements. This light source features a broad spectrum and high output power.

Features

- High power > 1.0mW @100mA
- Wide spectrum > 35nm @3dB
- Precise TEC temperature control
- High reliability
- RoHS compliant

Application

- Fiber Optic Gyroscope
- Optical Measurement
- Fiber Optic Sensing

Laser Specifications

Optoelectronic Performance Parameters (T=25℃, 100mA)

Parameter	Symbol	Unit	Typical Performance Index
Fiber Output Power	Pf	mW	≥1.0
Average Wavelength	λ	nm	1290-1320
3dB Spectral Width	Δ λ	nm	≥35
Ripple	M	dB	≤0.2
Polarization Extinction Ratio	PER	dB	≤1.0
Fiber Type	-	-	SM PM 6/125/250
Package Type	-	-	6 Pin
Operating Temperature	TW	° C	-45~70
Storage Temperature	TS	° C	-55~85
Thermistor coefficient	-	-	3950
Power Variation @ Operating Temperature 2*(Pmax-Pmin)/(Pmax+Pmin)	-	%	<8

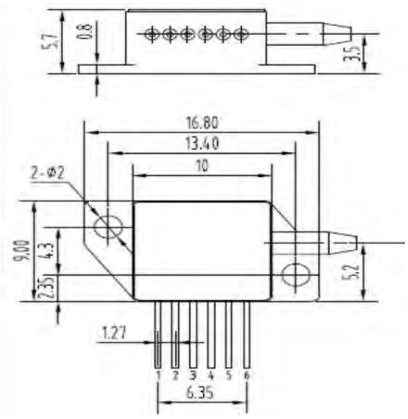
Maximum Parameter Range (T=25°C, If=150mA)

Parameter	Symbol	Unit	Typical Performance Index
Reverse Voltage	VR	V	≤3
Power-on Current	IF	mA	100
TEC Current	IC	A	≤1.2
Fiber Bending Radius		mm	≥30
Soldering Temperature	-	° C	≤260(10s)

Dimensions and Pin definitions

PackSage ize

unit (mm)



Pin definition

1	SLD (+)	2	SLD(-)
3	Thermistor	4	Thermistor
5	TEC-	6	TEC+

Fiber Specification

Fiber Specification	Min	Typ	Max	Unit
Fiber type	SM PM 6/125/250			
Loose tube length	12			cm
Fiber length	1.0	-	-	m
Connector type	None			

Safety Marking



Note:

• Invisible laser radiation. Avoid direct or scattered radiation exposure to eyes or skin.