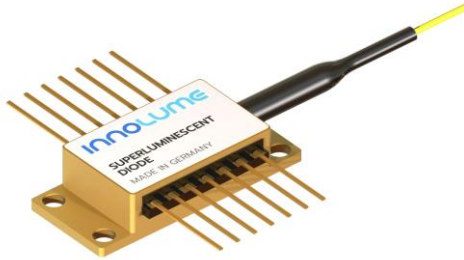


SLD1140080YY0D5MXXXX

Fiber Coupled Superluminescent Diode (SLD)



Features:

- Ultra broadband ASE spectra
- Low ripples
- Strong linear polarization
- Individual burn-in and thermal cycling screening
- Proprietary anti-reflection coating technology enabling high reliability
- Polarization maintaining PM980 fiber or HI1060 fiber
- 900um loose tube on fiber (optional)
- Built-in monitor photodiode (optional)

Applications:

- Fiber sensors
- Spectroscopy
- Instrumentation

Recommended Operating Conditions*

@ CW, the case is mounted on room temperature heatsink

Parameter	Min.	Typ.	Max.	Unit
Chip Temperature	20	25	30	°C
Forward Current		250	300	mA
Output Power	0.2	0.5		mW

* - recommended in terms of maximum spectrum width and flatness

Characteristics

@ CW, 25°C, 250mA

Parameter	Min.	Typ.	Max.	Unit
Forward Current @ 0.2mW			300	mA
Forward Voltage		1.3	1.8	V
Mean Wavelength	1130	1140	1150	nm
Bandwidth (FWHM)	65	80		nm
Ripples** (RMS)		0.02	0.1	dB
Excited State Maximum Position		1110		nm
Ground State Maximum Position		1170		nm
Spectrum Dip		4		dB
Polarisation Extinction Ratio (PER)	15	19		dB
Polarisation		TE		

** - RMS in 1nm range around ASE maximum, 20pm resolution

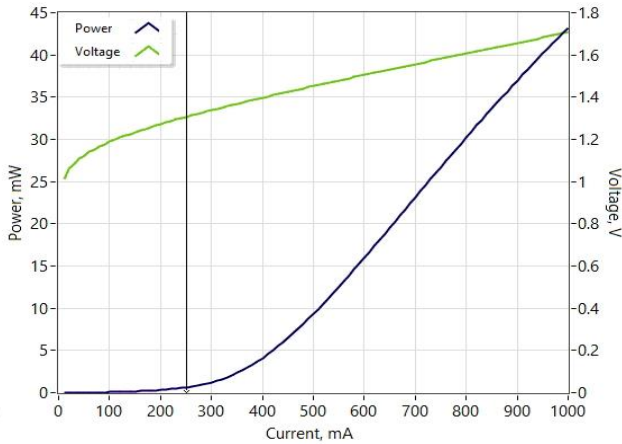
Absolute Maximum Ratings

Parameter	Min	Max	Unit
Output Optical Power		80	mW
Forward Current		800	mA
Reverse Voltage		2	V
TEC Current		3	A
TEC Voltage		4	V
Chip Operating Temperature	5	40	°C
Case Operating Temperature	0	70	°C
Storage Temperature	-40	85	°C
Pin Soldering Temperature (max 10 sec, max case temperature 120°C)		300	°C
Fiber Band Radius	3		cm

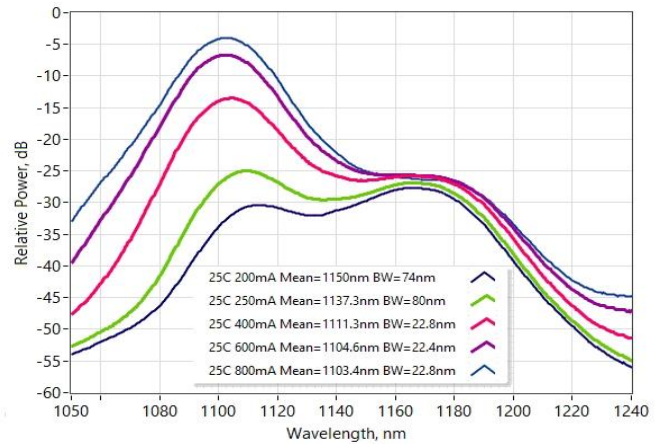
Typical Performance (for reference only)

@ CW, the case is mounted on room temperature heatsink

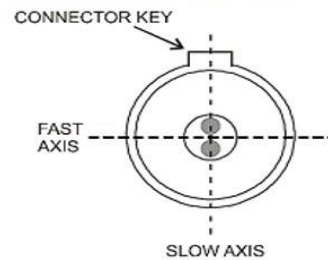
Light-Current-Voltage Characteristics



Optical Spectra (res. 1nm)



Thermistor specification			Fiber specification			
Parameters	Value	Unit	Parameters	Value	Value	Unit
Type	NTC		Fiber Type	HI1060	PM980	
Resistance @ 25°C	10±0.1	kOhm	Numerical Aperture (Typical)	0.14	0.12	
Beta 25-85°C	3435±1%	K	Cut-off Wavelength	920±50	900±70	nm
			Mode-Field Diameter	6.2±0.3 @1060nm	6.6±0.3 @1060nm	µm
			Cladding Diameter	125±1	125±1	µm
			Coating Diameter	245±15	245±15	µm
			Loose Tube Diameter (optional)	900	900	µm
			Connector	FC/APC	FC/APC	
			Key	narrow	narrow	



The output light is polarized along the slow axis of PM fiber.

