

PRELIMINARY PRODUCT DATA SHEET

SLD 1301NF-100STR

1310nm SLD Diode Module

Description:

The SLD 1301NF-100STR laser diode module is a 1310 nm SLD packaged in a 14 pin NF package. The SLD is optically coupled to an SMF fiber pigtail and includes a thermoelectric cooler, an electrically isolated temperature sensing thermistor, and an ST connector. The SLD 1301NF-100STR SLD modules are designed for sensor & datacom applications. The device is RoHS compliant.

Characteristics:

Parameter	Symbol	Conditions	Min.	Typ.	Max	Units
Optical power (fiber)	P_o	$T_{amb} = -20^{\circ} \text{ to } 65^{\circ} \text{ C.}; T_{slid} = 25^{\circ} \text{ C}$	150			mW
Forward drive current	I_f	$T_{amb} = -20^{\circ} \text{ to } 65^{\circ} \text{ C.}; T_{slid} = 25^{\circ} \text{ C}$		100		mA
Forward voltage	V_f	$T_{amb} = -20^{\circ} \text{ to } 65^{\circ} \text{ C.}; T_{slid} = 25^{\circ} \text{ C}$		1.2	2	V
Center wavelength	λ	$T_{amb} = -20^{\circ} \text{ to } 65^{\circ} \text{ C.}; T_{slid} = 25^{\circ} \text{ C}$		1310		nm
Spectral width	$\Delta\lambda$	$T_{amb} = -20^{\circ} \text{ to } 65^{\circ} \text{ C.}; T_{slid} = 25^{\circ} \text{ C}$		40		nm
Thermistor resistance	R	$T_{slid} = 25^{\circ} \text{ C.}$	9.9	10.0	10.1	$K\Omega$
Thermistor B constant	B	B25/50	3910.9	3950.0	3989.9	K
Cooling capacity	ΔT	$T_{slid} = 25^{\circ} \text{ C.}$	45			$^{\circ}\text{C}$
TEC Voltage @ $40^{\circ} \Delta T$	V_{tec}	$T_{slid} = 25^{\circ} \text{ C.}$		1.2		V
TEC Current @ $40^{\circ} \Delta T$	I_{tec}	$T_{slid} = 25^{\circ} \text{ C.}$		600		mA
Fiber Length	L	per outline	0.9	1	1.1	Meter
Operating temp. range	T_{op}	$T_{slid} = 25^{\circ} \text{ C.}$	-20		65	$^{\circ}\text{C}$
Storage temp. range	T_{stg}	Non operating	-40		85	$^{\circ}\text{C}$

- 1 TEC (+)
- 2,3,4,6,7,8, 13 N/C
- 5 SLD Anode / Case GND
- 9 SLD Cathode
- 10 SLD Anode / Case GND
- 11 Thermistor
- 12 Thermistor
- 14 TEC (-)

