Preliminary Data Sheet SCW 17B7-225R

1650nm Pulsed F-P Laser Diode Component for OSA / OTDR Applications

Description:

The SCW 17B7-225R laser diode modules are 1650nm F-P laser diodes packaged in a 3 pin TO56 package with a back-facet detector & window cap. These SCW laser diode modules are specifically designed for optical test equipment applications. The devices are RoHS compliant.

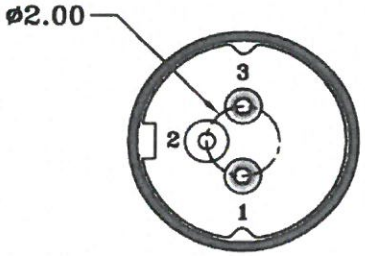
Maximum Ratings (T_{case} = 25° C.):

Parameter	Symbol	Conditions	Min.	Typ.	Max	Units
Forward current	I_f	P_w = 10 us; D/C = 1%			1200	mA
Maximum optical power	P_{oMAX}	P_w = 10 us; D/C = 1%			400	mW
Monitor max forward current	I_{FMON}	V_{FPD} = 1V			3	mA
Monitor max reverse voltage	V_{RMAX}				15	V
Lead soldering temperature	T_S				260	deg C

Characteristics (T_{case} = 25° C.):

Parameter	Symbol	Conditions	Min.	Typ.	Max	Units
Po (ex-facet) 1650nm	P_o	I_f = 1000 mA; P_w = 10 us; D/C = 1%	225			mW
Threshold Current	I_{th}	P_w = 10 us; D/C = 1%		50		mA
Forward Voltage	V_f	I_f = 1000 mA; P_w = 10 us; D/C = 1%		2.5	3.5	V
Reverse Voltage	V_r	I_R = 10 uA		2		
Center Wavelength	λ	I_f = 1000 mA; P_w = 10 us; D/C = 1%	1640	1650	1665	nm
Spectral Width (RMS)	$\Delta\lambda$	I_f = 1000 mA; P_w = 10 us; D/C = 1%			12	nm
Wavelength / Temp Coeff.	$\Delta\lambda$ / °C			0.5		nm/°C
Monitor Current	I_{RMON}	Po = 5mW CW; V_{RPD} = 5V		5		uA
Monitor Dark Current	I_D	V_{RPD} = 5V		1	20	nA
Rise & Fall time 10% - 90%	T_R / T_F	I_f = 1000 mA; P_w = 10 us; D/C = 1%		0.5	1	ns
DQE	S	I_f = 1000 mA; P_w = 10 us; D/C = 1%		0.2		W/A
Transverse FF Angle (50%)	θ_T	I_f = 1000 mA; P_w = 10 us; D/C = 1%		27		deg
Lateral FF Angle (50%)	θ_L	I_f = 1000 mA; P_w = 10 us; D/C = 1%		11		deg
Environmental						
Operating temp. range	T_{op}	I_f = 1000 mA; P_w = 10 us; D/C = 1%	-40		70	°C
Storage temp. range	T_{stg}	Non operating	-40		85	°C

PIN OUT	FUNCTION
1	LD Cathode
2	GND / LD Anode / BFM Cathode
3	BFM Anode



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