

DESCRIPTION

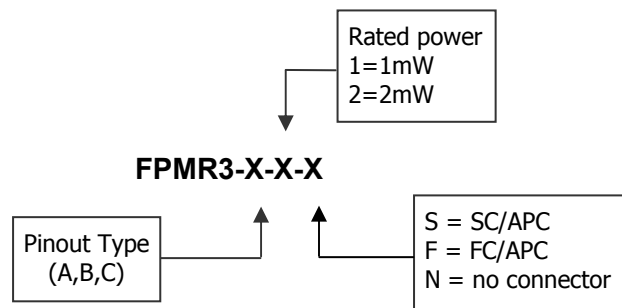
The FPMR3 series module incorporates a linear multi-quantum well (MQW) laser emitting at 1310 nm, hermetically sealed in an industry standard coaxial package with a single mode fiber pigtail. This laser is especially suited as an uncooled, low cost light source for analog CATV return path.


FEATURES

- High reliability linear MQW laser
- Internal monitor photodiode
- Wide operating temperature range
- RoHS compliant

APPLICATIONS

- CATV return path
- RF over fiber

MODEL NUMBERS:

MAXIMUM RATINGS

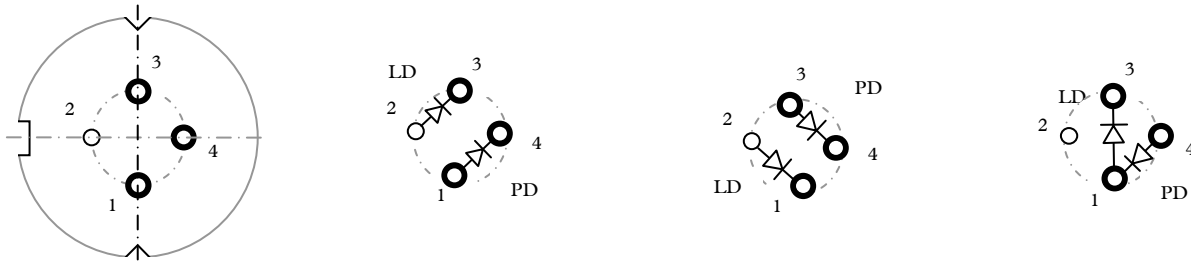
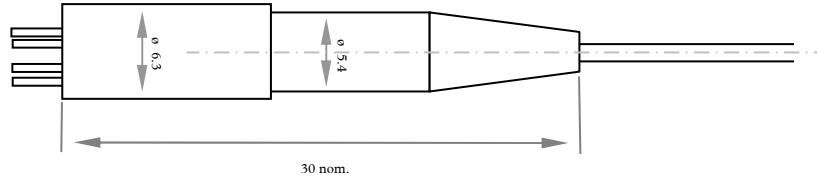
PARAMETER	CONDITION	LIMIT
Storage Temperature	Continuous	-40 to +85 °C
Monitor Photodiode Reverse Voltage	60 seconds	15 V
	Continuous	10 V
Forward DC Laser Current	Continuous	100 mA
Reverse DC Laser Voltage	Continuous	1 V

ELECTRO-OPTICAL CHARACTERISTICS

(Over operating temperature range, unless otherwise specified)

PARAMETER	SYMBOL	CONDITIONS	MIN	MAX	UNIT
Operating Temperature	T_{OP}	$I_F = I_{OP}$	-20	85	°C
Threshold Current	I_{TH}	T = 25 °C T = 85 °C	--	15 50	mA
Operating Voltage	V_{OP}		--	2.1	V
Operating Output Power	P_o		-	2	mW
Monitor PD Responsivity	r_{MPD}	--	10	200	μA/mW
Monitor PD Dark Current	I_D	$I_{OP} = 0$ mA	--	0.2	μA
Operating Wavelength	λ_{OP}	$I_F = I_{OP}$, T = 25 °C	1290	1330	nm
Spectral Width	$\Delta\lambda$	$I_F = I_{OP}$		4	nm
Tracking Error	E_R		-1	+1	dB
Bandwidth			2.5		GHz
2 nd Order Intermodulation	IMD2	See Note (1) Below	--	-53	dBc
3 rd Order Intermodulation	IMD3		--	-61	dBc
Relative Intensity Noise	RIN	$I_F = I_{OP}$	--	-140	dB/Hz

Note: Test conditions: P_o at rated power, 25 °C, OMI = 10%, 2-tone, 936 MHz and 958 MHz, received power = -4 dBm

MECHANICAL SPECIFICATIONS (mm) and PINOUTS


	Type A	Type B	Type C
1	PD Anode	LD Cathode	LD Anode / PD Cathode
2 (Case Ground)	LD Anode	LD Anode	Case Ground
3	LD Cathode	PD Anode	LD Cathode
4	PD Cathode	PD Cathode	PD Anode

- SMF-28 optical fiber, flame retardant Hytrel coating, 0.9 mm diameter
- Fiber Length: 1-meter minimum, with SC/APC or FC/APC connector termination
- Type A, B, C, and custom pin configurations available. Mounting bracket optional.