

1653nm XMD-packaged fiber coupled module

Features

- 6-pin XMD package
- Single mode fiber coupled
- Output power up to 15mW
- TEC and Thermistor included
- Eye-safe wavelength



Applications

- Detection of methane concentration in mine
- Methane concentration detection in urban integrated pipe gallery
- Methane concentration detection in buildings
- Household methane concentration detection

Opto-electrical	Symbol	Unit	Min	Typical	Max	Condition
Output Power	P _o	mW	6			
Operating current	I _{op}	mA			80	
Threshold current	I _{th}	mA		5	15	T=25°C
Operating voltage	V _{op}	V		1.2	1.9	I _{op}
Slope efficiency	η	mW/mA	0.12	0.17		
Center wavelength	λ _c	nm	1651	1653	1654	I _{op}
Spectral width (-20dB)	Δλ	nm			1	I _{op}
Side mode suppression	SMSR	dB	30			I _{op}
TEC operating voltage	V _{TEC}	V			1.7	
TEC operating current	I _{TEC}	A			1.1	
Thermistor resistance	R _t	KΩ/β	10 ± 1%/4050			T=25°C
Type of SM fiber			G657A1			
Fiber length		M	1			
OD of jacket		μm	900			
Fiber termination			FC/APC			
Fiber bending radius		mm	15			
Mechanical						
Package dimensions			9.5 × 6.4 × 5.35			
Pin soldering temp					260° C	<5s
Absolute limits						
Working temperature	T _{op}	° C	-10		75	
Storage temperature	T _{STG}	° C	-40		85	
Max optical power	P _o	mW	10			
Max operating current	I _f	mA	120			
Max reverse voltage	V _r	V	2			
Max TEC current	I _{TEC}	A	1.1			

- Nominal wavelength 1653.7nm
- Laser performance is tested in CW mode at 25°C of housing temperature
- Thermistor resistance is defined at 25°C , the β value is valid in the temperature range of 0 ~ 50 °C