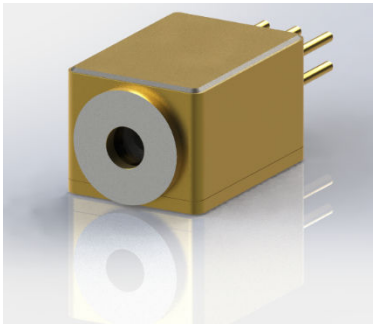
QPC LASERS

1653nm XMD-packaged Module

Features

- 6-pin XMD package
- Direct output from a sealed window
- Output power up to 20mW
- 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	Test Condition
Output power	Po	mW	3			Iop=Ith+20mA
Operating current	Iop	mA			Ith+20	
Threshold current	Ith	mA		5	15	T=25℃
Operating voltage	Vop	V		1.2	1.9	Iop
Slope efficiency	η	mW/mA	0.2	0.25		
Center wavelength	λc	nm	1651	1653	1654	Iop
Spectral width (-20dB)	Δλ	nm			1	Iop
Side mode suppression ratio	SMSR	dB	30			Iop
Beam diameter	Φ	mm			1	@80mm working distance
Rise/fall time	Tr/Tf	ns			0.1	Po= 3mW, 20% to 80% peak power
TEC operating voltage	VTEC	V			1.7	
TEC operating current	ITEC	A			1.1	
Thermistor resistance	Rt	KΩ/β	10±1%/3950			T=25℃
Mechanical						
Housing dimensions		mm	9.5×6.4×5.35			
Pin soldering temperature					260°C	<5 s
Absolute limits						
Working temperature	Top	°C	-10		75	
Storage temperature	TSTG	°C	-40		85	
Max optical power	Po	mW	10			
Max operating current	If	mA	120			
Max reverse voltage	Vr	V	2			
Max TEC current	ITEC	A	0.5			

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