1653nm DFB Laser Diode For Methane Sensor CH4 Sensing

1653nm DFB Laser Diode Single Longitudinal for CH4 Sensing has stable wavelength and high power output, with collimated lens. It is designed specifically for Methane(CH4) sensing.This narrow line width DFB Laser diode improves application performance across a wide range of operating conditions.

Features:
High Quality DFB chip, built-in TEC and NTC;
Stable wavelength and high power output;
Small Size package;
With collimating lens.

Applications:
Laser gas analysis and Gas detection system.
Methane Detection Device

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Storage temperature	Ts	-	-40	-	85	℃
Operating case temperature	Top	-	-20	-	70	℃
Laser forward current	IF	CW	-	120	-	mA
Laser reverse voltage	VLR	-	-	-	2	V
Lead welding temperature/Time	Tsld	-	-	260/10	-	℃/s

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak wavelength	λ	ITH = 35mA	1652.7	1653.7	1654.7	nm
Optical output power	PO	CW	5	-	-	mW
Threshold current	ITH	CW	-	10	15	mA
Operating current	IOP	CW, 5mW	-	40	-	mA
Side-mode suppression ratio	SMSR	CW, 5mW	35	40	-	dB
Spectral width(20dB)	Δλ	CW, 5mW	-	0.2	-	nm
Wavelength stability	λS	CW,5mW,25℃	-0.1	-	0.1	nm
Wave. temp. coefficient	Δλ/ΔT	15℃ to 35℃	-	0.1	-	nm/℃
Wave. current coefficient	Δλ/ΔI	-	-	0.01	-	nm/mA
Thermistor	Rth	Ttherm = 25℃	9.5	10	10.5	kΩ