

# 1650nm DFB TO-can datasheet

P/N :WITQ-01A

## Description

The 1650nm products are AlGaInAs/InP based DFB LD for Methane sensing applications.

## Features

For 1654nm wavelength

Excellent SMSR Performance

High reliability design

RoHS Compliant

## Applications

Methane Gas Sensing

## Absolute Maximum Ratings

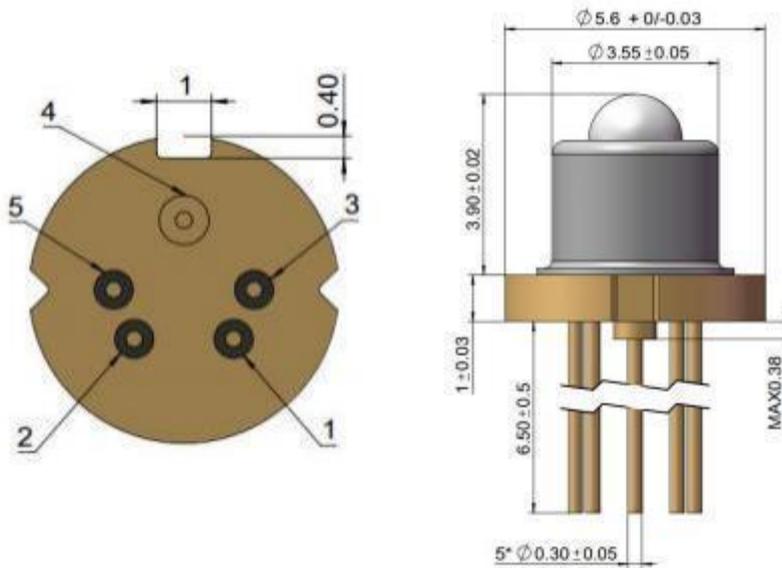
Parameters	Symbol	Min	Max	Unit
Storage Temperature	TSTG	-40	100	°C
Operating Case Temperature	TC	0	70	°C
Reverse Voltage(LD)	VRL	-	2	V
Laser Forward Current	If	-	100	mA
Soldering Temperature	-	-	260	°C
Soldering Duration	-	-	10	S

## Electrical/Optical Characteristics(Tc = 25 °C , unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Threshold current	Ith	CW	-	-	15	mA
Output Optical power	Po	CW, Iop=50mA	4	6	-	mW
Operating Voltage	Vf	CW, Iop=50mA	-	1.2	1.6	V
Series Resistance	Rs	CW, Iop=50mA	-	-	15	Ω
Po Kink	-	CW,Ith +5mA to 70mA	-	-	30	%
Center Wavelength	λc	CW, Tc =25°C,Iop=50mA	1648.7	1649.7	1650.7	nm
Side Mode Suppression Ratio	SMSR	CW, Iop=50mA	35	-	-	dB
Temperature Tuning Coefficient	Δλ	CW, Iop=50mA	-	0.1	-	nm/°C
Thermal Characteristics						
Thermistor Resistance	Rth	Tc=25°C	9.9k	10k	10.1k	Ω
B Constant of Rth	B	-	3890	3930	3969	K

## Package: TO 56

### Dimensions( unit: mm)



PIN Number	Definition
1	Heater
2	Thermistor
3	LD-
4	Thermistor/Heater
5	LD+

### Precautions

- 1.Soldering irons, workbenches assembly and other tools and fixtures should be grounded to discharge static electricity. Workers should wear anti-static clothes and be grounded via a wristband with high resistance (~ 10kΩ) for safety.
- 2.In order to prevent contact failure or short-circuit, please make sure correct connection of peripheral circuit when soldering. Otherwise, breakdown by overheat or burning may occur.
- 3.Please make sure power off when you touch this product connected to the printed circuit boards. Otherwise, electric shock or burning may occur.
- 4.Use the product with the rated voltage described in the specifications. If the voltage exceeds the maximum rating, overheating or burning may occur.