

Description

Distributed feedback laser diode(DFB LD) operating at 1286nm is packaged in cooled TO-can for use in ONU of 25GS-PON.

The cooled TO-can has a micro thermo-electronic cooler (TEC) to control the operating temperature of DFB LD.

Features

- Low threshold current and low operating current
- Packaged in a hermetic sealed TO60-can with TEC and thermistor
- Wide operating temperature range from -40°C to 85°C
- Modulation capability up to 24.883Gbps
- Complies with Telcordia GR-468

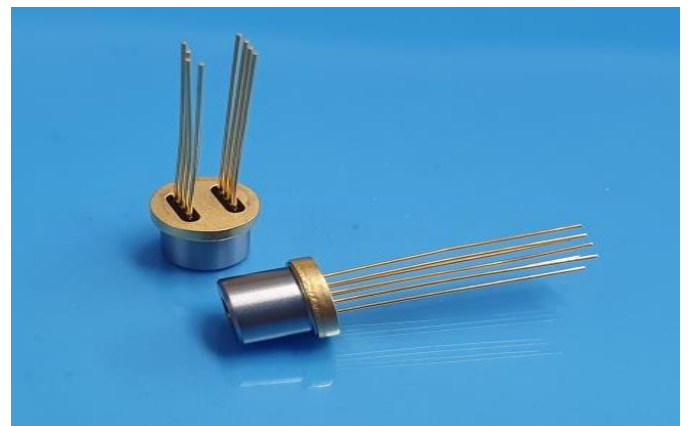
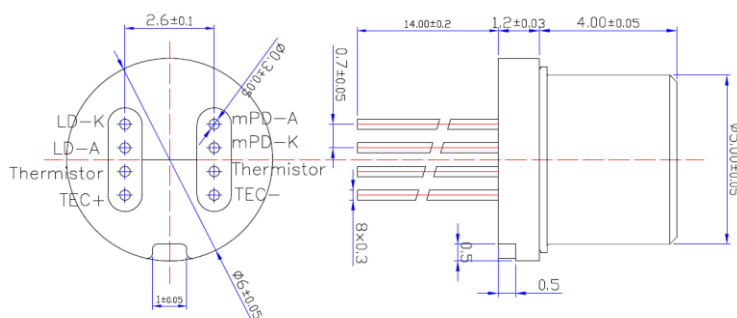
Application

- ONU for 25GS-PON

Specification

Parameter	Symbol	Min	Typ	Max	Unit	Test condition
Threshold current	I_{th}			20	mA	$T_{set}=50^{\circ}\text{C}$
Operating Current	I_{op}			60	mA	$T_{set}=50^{\circ}\text{C}$, CW=10mW
Slope Efficiency	η	0.25			W/A	$T_{set}=50^{\circ}\text{C}$
Operating Voltage	V_{op}	-	1.1	1.6	V	at CW driving current of 60mA
Operating wavelength range	λ_p	1284.2	1286	1287.8	nm	$T_{set}=50^{\circ}\text{C}$, CW=10mW
Rise time	t_r		17		ps	20~80%
Fall time	t_f		23		ps	20~80%
SMSR	dB	35				$T_{set}=50^{\circ}\text{C}$, CW=10mW
Monitor PD Current	I_{mop}	80	-		uA	CW=10mW
Monitor PD dark Current	I_d	-	0.5	1.5	nA	$V_r=5\text{V}$
Monitor PD capacitance	C	-	-	15	pF	$V_r=5\text{V}$
TEC max current	I_{TEC}	-		0.6	A	at ΔT_{max}
Maximum delta-T, ΔT_{max}	ΔT_{max}	40	50	-	K	Q=0, Vacuum, T=300K
Focal length		9.6	10.1	10.5	mm	

PIN MAP (bottom View)



Description

Distributed feedback laser diode(DFB LD) is packaged in TO-can for use in uncooled CWDM applications up to 10.7Gbps. CWDM wavelengths are available from 1270nm to 1430nm.

Features

- Low threshold current and low operating current
- Packaged in a hermetic sealed TO56-can
- Wide operating temperature range from -40°C to 95°C
- Modulation capability up to 10.7Gbps

Application

- SONET/SDH OC-192/STM-64
- 10Gbps Ethernet
- 10Gbps Fiber Channel

Specification

Parameter	Symbol	Min	Typ	Max	Unit	Test condition
Threshold Current	I_{th}		8	15	mA	T=25°C
Operating Current	I_{op}		-	35	mA	T=25°C, $P_o=5mW$
Slope Efficiency	η	0.35			W/A	T=25°C, $P_o=5mW$
Operating Voltage	V_{op}	-		1.4	V	T=25°C, $P_o=5mW$
Peak wavelength	λ_p	1286	1290	1292	nm	T=25°C, $P_o=5mW$
Rise time	t_r			50	ps	20~80%
Fall time	t_f			50	ps	20~80%
SMSR	dB	35				T=25°C, $P_o=5mW$
Monitor PD Current	I_{mop}	80	-		uA	T=25°C, $P_o=5mW$
Monitor PD dark Current	I_d	-	0.5	1.5	nA	$V_r=5V$
Monitor PD capacitance	C	-	-	15	pF	$V_r=5V$
Focal length		7.2	7.5	7.8	mm	

PIN MAP (bottom View)

