

1310 nm Light Emitting Diodes

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Features

- High efficiency
- -40 to +85°C operating temperature
- Hermetically sealed active component

Packaging

- TO-46 package with integrated ball lens cap

Applications

- Optical data communication transmitter
- E-O converters
- LANS
- FDDI networks
- FITL

Absolute Maximum Ratings (T_c=25°C)

Parameter	Symbol	Value	Unit
Reverse Voltage	V _R	2	V
Forward Current	I _F	150	mA
Soldering		240°C /10 sec	
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +85	°C

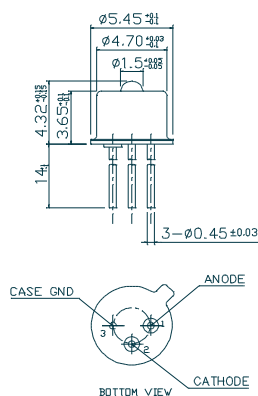
Optical and Electrical Characteristics (T_c = 25°C, CW, I_f = 60 mA)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Coupled Power	P _o	38	-	-	μW	
Wavelength	λ	1280	1310	1350	nm	
Spectral Width	Δλ	-	-	170	nm	
Forward Voltage	V _F	-	1.2	1.7	V	
Bandwidth	BW	115	-	-	MHz	
Rise Time, Fall Time	t _r , t _f	-	-	3	ns	10% to 90%
Output Power over Temperature	ΔP _o /ΔT	-	-	±3	dB	-40°C to +85°C

All optical data refer to a coupled 62.5/125μm multi-mode fiber.

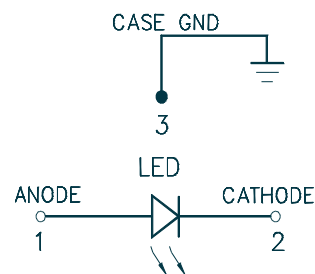
Diagrams

Diagram 1



TO-46 Package With Lens
All dimensions in mm

Diagram 2



Functional Schematic

1310 nm Light Emitting Diodes

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Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

Laser Safety: Radiation emitted by LED devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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