

980nm high power laser diodes

Description

The 980nm high power laser diodes with optimized QW structure made by cboe have a high reliability, high performance. It has several structures of emitter width. The 940nm series high power laser diodes can get 4.0W at RT and CW condition. These products can be applied to solid-state laser pumping sources, medical usage, target designation, and free space optical communication applications.

Features	Applications
<ul style="list-style-type: none"> ● 4.0W CW Output Power ● Typical 980nm emission wavelength ● Variety of emitter width: 200μm ● Optimized QW Structure ● Package: C-mount & TO Mount 	<ul style="list-style-type: none"> ● Solid-state Laser Pumping ● Medical Usage ● Target Designator ● Free-space Optical Communication

Specifications (25°C)

Type	Unit	LD 940-4W					
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Optical Specification

CW Output Power P_o	mW	4					
Operating Mode		CW					
Center Wavelength λ_c	nm	940					
Wavelength Tolerance	nm	±10					
Spectral Width $\Delta\lambda$	nm	≤2.5					
Emitting Area	μm	200×1.5					
Wavelength Temperature Coefficient	nm/°C	0.3					
Beam Divergence $\theta_{\perp} \times \theta_{//}$	Deg	36×7					
Polarization		TE					

Electrical Specification

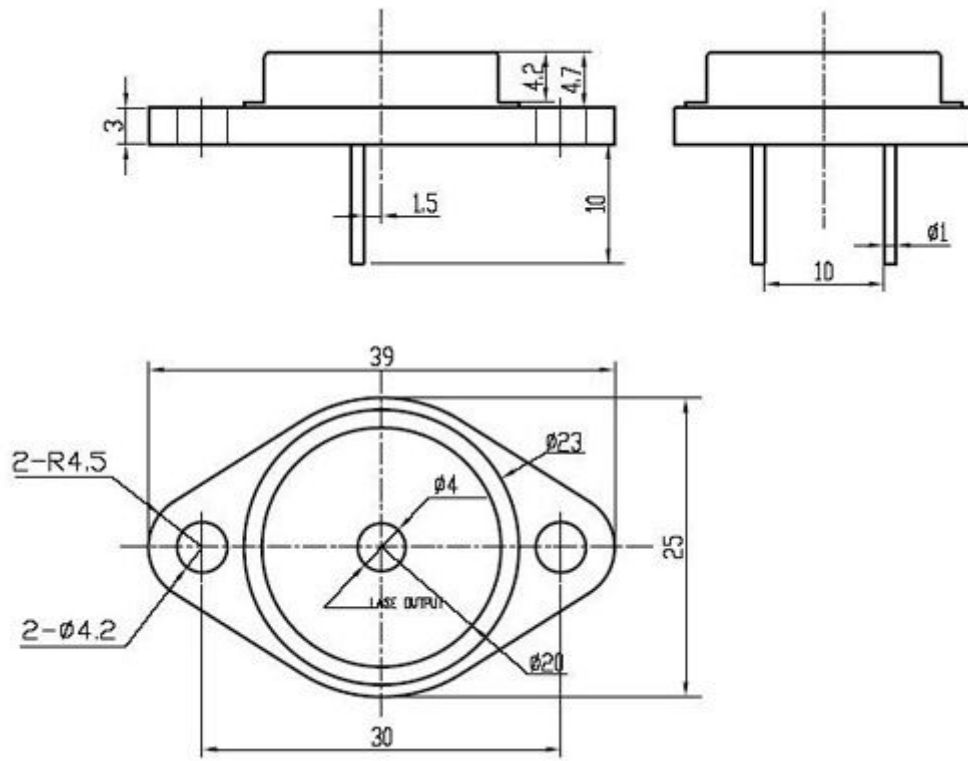
Slope Efficiency E_s	W/A	≥1.03					
Threshold Current I_{th}	A	≤0.35					
Operating Current I_o	A	≤4.0					
Operating Voltage V_f	V	≤2.3					
Series Resistance R_d	Ω	≤0.2					
Package Style		C-Mount TO-3					

Absolute Maximum Ratings

Reverse Voltage V_r	V	2.0					
Operating Temperature T_o	°C	15-25					
Storage Temperature T_{stg}	°C	-10~60					

Package Dimensions

TO-3 Package (Unit:mm)



C-mount Heat Sink (Unit:mm, Heat Sink(+))

