



D650-5I

• 650nm 5mW laser diode •

Product Description

D650-5I is a 650nm MOCVD grown laser diode with quantum well structures. It is an ideal light source for printing and medical applications.

Features

- Device: 650nm laser diode
- Power: 5mW
- Package Type: TO-18 (5.6mm Φ)
- Mode: Single transverse mode

• Absolute Maximum Rating (Tc=25°C)

Characteristics	Symbols	Rating	Unit
Optical power	Po	7	mW
Reverse Voltage (Laser)	V	2	V
Reverse Voltage (PIN)	V	30	V
Operating Temperature	Top	-10 to +60	°C
Storage Temperature	Tstg	-40 to +85	°C

• Electrical and Optical Characteristics (Tc=25°C)

Characteristics	Symbols	Min	Typ	Max.	Unit	Condition
Optical Power	Po	-	5	-	mW	-
Threshold Current	I _{th}	-	15	20	mA	Po=5mW
Operating Current	I _{op}	-	20	25	mA	Po=5mW
Operating Voltage	V _{op}	-	2.2	2.6	Volts	Po=5mW
Lasing Wavelength	λ	640	650	660	nm	Po=5mW
Beam Divergence	θ_{\parallel}	5	8	12	deg	Po=5mW
	θ_{\perp}	23	28	32	Deg	Po=5mW
Beam Angle Deviation	θ_{\parallel}	-3		3	Deg	Po=5mW
	θ_{\perp}	-3		3	Deg	Po=5mW
Monitor Current	I _m	0.05	0.15	0.3	mA	Po=5mW
Emission Point Accuracy	ΔX	-80	-	80	μ m	
	ΔY	-80	-	80	μ m	
	ΔZ	-80	-	80	μ m	
Astigmatism	A _s	-	5	15	μ m	

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