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 (5.6mmΦ)
- Mode: Singe 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	Ith	-	15	20	mA	Po=5mW
Operating Current	Iop	-	20	25	mA	Po=5mW
Operating Voltage	Vop	-	2.2	2.6	Volts	Po=5mW
Lasing Wavelength	λ	640	650	660	nm	Po=5mW
Beam Divergence	$\theta_{\parallel}$	5	8	12	deg	Po=5mW
	$\theta_{\perp}$	23	28	32	Deg	Po=5mW
Beam Angle Deviation	$\theta_{\parallel}$	-3		3	Deg	Po=5mW
	$\theta_{\perp}$	-3		3	Deg	Po=5mW
Monitor Current	Im	0.05	0.15	0.3	mA	Po=5mW
Emission Point Accuracy	ΔX	-80	-	80	μm	
	ΔY	-80	-	80	μm	
	ΔZ	-80	-	80	μm	
Astigmatism	As	-	5	15	μm	

US LASERS, INC. • 414 B Cloverleaf Drive, Baldwin Park, CA 91706
Tel: 626.968.7181 • Fax: 626.934.0161 • www.us-lasers.com