

CS405180M5M

450nm Compact Laser Diode Modules Key features

Visible light $\lambda = 405\text{nm}$
 Output powers =180mW
 Package type=5.6mm Φ



Applications

Blu-ray Disc/HD DVD drive
 Other new application

Laser Diode Solutions

CS405180M5M is a 405nm band laser diode. It's an attractive light source, with a typical light output power of CW 180mW. It's suitable for use as high reliability laser diode in a wide range of industrial application.

Electrical and Optical Characteristics at $T_c=25^\circ\text{C}$

Item	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	-	180	mW	-
Threshold Current	Ith	-	100	130	mA	-
Operating Current	Iop	-	230	270	mA	po=180mW
Slope Efficiency	SE	1	1.5	2	mW/mA	-
Operating Voltage	Vop	-	4.1	4.6	V	po=180mW
Peak Wavelength	λ_p	400	405	410	nm	-
Beam Divergence	$\Theta_{//}$	8	16	26	deg	po=180mW
	Θ_{\perp}	35	42	55	deg	po=180mW
Beam Deviation angle	$\Delta\Theta_{//}$	-5	-	5	deg	po=180mW
	$\Delta\Theta_{\perp}$	-5	-	5	deg	po=180mW

Absolute Maximum Rating at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	Po	250	mW
Laser Diode Reverse Voltage	Vr(LD)	5	V
PD Reverse Voltage	Vr(PD)	20	V
Operating Temperature	To	0~+30	°C
Storage Temperature	Ts	-35~+85	°C

Electrical Connection

Package Type



