



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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# D405-120

• 405nm 120mW laser diode•

## Features

- Device: 405nm laser diode
- Power: 120mW
- Package Type: 5.6mm TO
- PIN configuration: Style B

▪ Absolute Maximum Rating (Tc=25°C)

Characteristics	Symbols	Rating	Unit
Optical power	Po	140	mW
Reverse Voltage (Laser)	V	5	V
Reverse Voltage (PIN)	V	20	V
Operating Temperature	Top	-10 to +70	°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	-	120	-	mW	-
Threshold Current	Ith	-	35	50	mA	Po=120mW
Operating Current	Iop	-	120	150	mA	Po=120mW
Operating Voltage	Vop	-	4.8	6.0	Volts	Po=120mW
Slope Efficiency	$\eta$	-	1.3	-	mW/mA	-
Lasing Wavelength	$\lambda$	395	405	415	nm	Po=120mW
Beam Divergence	$\theta_{\parallel}$	6.0	9.0	12	deg	Po=120mW
	$\theta_{\perp}$	16	20	25	deg	Po=120mW
Beam Angle Deviation	$\theta_{\parallel}$	-3		3	deg	Po=120mW
	$\theta_{\perp}$	-3		3	deg	Po=120mW
Monitor Current	Im	-	0.40	0.70	mA	Po=120mW
Emission Point Accuracy	$\Delta X$	-80	-	80	$\mu\text{m}$	
	$\Delta Y$	-80	-	80	$\mu\text{m}$	
	$\Delta Z$	-80	-	80	$\mu\text{m}$	
Astigmatism	As	-	-	15	$\mu\text{m}$	