# imall

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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





### D405-20

#### 405nm 20mW laser diode

#### Features

- 405nm laser diode • Device: 20mW
- Power:
- Package Type: 5.6mm TO
- PIN configuration Style B

#### Absolute Maximum Rating (Tc=25°C)

Characteristics	Symbols	Rating	Unit	
Optical power	Po	20	mW	
Reverse Voltage (Laser)	V	2	V	
Reverse Voltage (PIN)	V	30	V	
Operating Temperature	Тор	-10 to +70	°C	
Storage Temperature	Tstg	-40 to +85	°C	

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

Characteristics	Symbols	Min	Тур	Max.	Unit	Condition
Optical Power	Po	-	20	-	mW	-
Threshold Current	lth	-	25	50	mA	Po=20mW
Operating Current	lop	-	50	75	mA	Po=20mW
Operating Voltage	Vop	-	5.0	6.5	Volts	Po=20mW
Slope Efficiency	η	-	1.3	-	mW/mA	-
Lasing Wavelength	λ	395	405	415	nm	Po=20mW
Beam Divergence	θ∥	6.0	9.0	12	deg	Po=20mW
	θ⊥	16	20	25	deg	Po=20mW
Beam Angle Deviation	θ∥	-3		3	deg	Po=20mW
	θ⊥	-3		3	deg	Po=20mW
Monitor Current	lm	-	0.20	0.50	mA	Po=20mW
Emission Point Accuracy	ΔX	-80	-	80	μm	
	ΔY	-80	-	80	μm	
	ΔZ	-80	-	80	μm	
Astigmatism	As	-	-	15	μm	