

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!



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## US-Lasers: 635nm-5mW - Red Laser Diode and Red Diode Laser Module

Links to Laser Diode &

Laser Module

<u>Laser Diodes</u> <u>Laser Diode Module</u> <u>Micro Laser Module</u>

Variable Output
Laser Diode Module

Configurations and

**Specifications**>>>>>> **N635-5 NM635-5 EPM635-5** 

DATA SHEETS MM635nm 5mWRED LASER MODULE				
Barrel Specs:	Weight & Wire Lengths:	Lens Housing Specs:		
• 2 Pieces	Module with 6" wire leads - 49 grain wt.b	• 12 - 56 Thread Size		
• 12 - 56 Thread Size	Module without 6" wire leads - 42 grain wt	3.0mm Aperture		
• Dia: 6.4mm	Module with spring leads - 42 1/2 grain wt.	4.0mm Plastic Lens		
Length: 17mm	Spring 2.4mm dia. 4mm long (trimmable)			

## RED LASER DIODE DATA SHEET

**ABSOLUTE MAXIMUM RATINGS -** (Tc=25 °

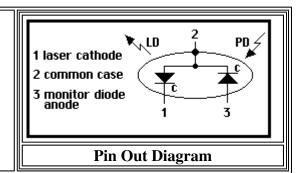
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## TECHNICAL DATA

Visible laser diode light 635nm

output
Optical power output
Package Type
5.6mm

Built-in photo diode for monitoring laser output



Items	Symbols	Values	Unit
Optical output power	Po	5	mW
Laser diode reverse voltage	V	2	V
Photo diode reverse voltage	V	30	V
Operating temperature	Topr	-10 ~ +40	°C
Storage temperature	Tstg	-40 ~ +85	$^{\circ}\mathrm{C}$

OPTICAL and ELECTRICAL CHARACTERISTICS - (Tc=25 °C)						
Items	Symbols	Min.	Тур.	Max.	Unit	Test Condition
Optical output power	$P_{o}$	-	-	5	mW	Kink free
Threshold current	$I_{th}$	30	35	45	mA	$P_o = 5 \text{mW}$
Operating current	$I_{op}$	-	45	70	mA	$P_o = 5mW$
Operating voltage	$V_{op}$	-	-	2.5	V	$P_o = 5 \text{mW}$
Lasing wavelength	•	630	635	645	nm	$P_o = 5 \text{mW}$
Beam divergence		5	8	11	deg	$P_o = 5 \text{mW}$

Beam divergence		25	31	37	deg	$P_o = 5 \text{mW}$
Off Axis Angle		-	-	+/-3	deg	
Off Axis Angle		-	-	+/-3	deg	
Monitor current	$I_{m}$	-	35	-	uA	$P_0 = 5 \text{mW}, V_R = 5 \text{V}$
Astigmatism	$A_s$	-	11	-	um	$P_0 = 5 \text{mW,NA} = 0.4$
MTTF				3-5,000 hrs.		$P_o = 5 \text{mW}$
Emitter Size	$10 \times 60 \text{ Microns}$ - Emitter Distance to Cap Lens = $0.3 \text{mm}$					
Structure	IlGaInP N	ИOW				

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