

# US-Lasers: 640nm-5mW - Red Laser Diode and Red Diode Laser Module

Links to Laser Diode & Laser Module Configurations and Specifications  
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## MM640-5

DATA SHEETS .... MM640nm 5mW ....RED LASER MODULE & DIODE		
<b>Barrel Specs:</b> <ul style="list-style-type: none"> <li>• 2 Pieces</li> <li>• 12 - 56 Thread Size</li> <li>• Dia: 6.4mm</li> <li>• Length: 17mm</li> </ul>	<b>Weight &amp; Wire Lengths:</b> <ul style="list-style-type: none"> <li>• Module with 6" wire leads - 49 grain wt.b</li> <li>• Module without 6" wire leads - 42 grain wt</li> <li>• Module with spring leads - 42 1/2 grain wt.</li> <li>• Spring 2.4mm dia. 4mm long (trimmable)</li> </ul>	<b>Lens Housing Specs:</b> <ul style="list-style-type: none"> <li>• 12 - 56 Thread Size</li> <li>• 3.0mm Aperture</li> <li>• 4.0mm Plastic Lens</li> </ul>

### RED LASER DIODE DATA SHEET

### ABSOLUTE MAXIMUM RATINGS - (Tc=25 °C)

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<b>TECHNICAL DATA</b> Visible laser diode light output                      640nm Optical power output    5mW CW Package Type    5.6mm Built-in photo diode for monitoring laser output	<p><b>Pin Out Diagram</b></p>
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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 ~ +50	°C
Storage temperature	Tstg	-40 ~ +85	°C

### OPTICAL and ELECTRICAL CHARACTERISTICS - (Tc=25 °C)

Items	Symbols	Min.	Typ.	Max.	Unit	Test Condition
Optical output power	Po	-	5	-	mW	-
Threshold current	Ith	-	30	65	mA	-
Operating current	Iop	-	55	75	mA	Po=5mW
Operating voltage	Vop	-	2.7	-	V	Po=5mW
Lasing wavelength		635	640	645	nm	Po=5mW
Beam divergence		-	5	11	deg	Po=5mW
Beam divergence		-	25	37	deg	Po=5mW

Monitor current	Im	-	10	20	uA	Po=5mW
Astigmatism	As	-	11	-	um	Po=5mW
MTTF				3-5,000		Po=5mW
				hrs.		
Emitter Size	10 x 60 Microns - Emitter Distance to Cap Lens = 0.3mm					
Structure	Index Guided					

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