

# US-Lasers: 650nm-5mW Samsung Visible Laser Diode Specifications

Links to Laser Diode & Laser Module

[Laser Diodes](#) [Laser Diode Module](#) [Micro Laser Module](#)

[Variable Output Laser Diode Module](#)

Configurations and Specifications

[SD650-5](#)

[SM650-5](#)

[MM650-5](#)

[EPSM650-5](#)

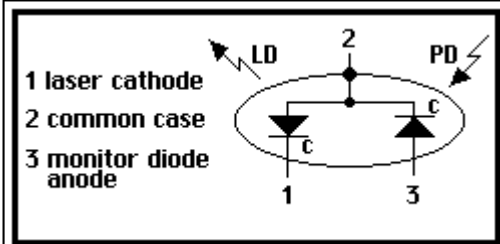
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## DATA SHEETS .... EPSM & SM650nm 5mW ....RED LASER MODULE

Barrel Specs:	Collect Specs:	Lens Housing Specs:
<ul style="list-style-type: none"> <li>3/8 - 56 Thread Size</li> <li>Dia: 10.4mm</li> <li>Length: 17mm</li> </ul>	<ul style="list-style-type: none"> <li>3/8 - 56 Thread Size</li> <li>4.3mm Aperture</li> <li>Half Hard Brassbbb</li> </ul>	<ul style="list-style-type: none"> <li>3/8 - 56 Thread Size</li> <li>3.7mm Aperture</li> <li>7mm Plastic Lens</li> </ul>

### RED LASER DIODE DATA SHEET

ABSOLUTE MAXIMUM RATINGS (Tc=25 °C)

<p><b>TECHNICAL DATA</b></p> <p>Visible laser diode light output                      650nm</p> <p>Optical power output                                      5mW CW</p> <p>Package Type    TO-18</p> <p>Built-in photo diode for monitoring laser output</p>	 <p><b>Pin Out Diagram - Style A</b></p>
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Items	Symbols	Values	Unit
Optical output power	Po	7	mW
Laser diode reverse voltage	V	2	V
Photo diode reverse voltage	V	30	V
Operating temperature	Topr	-10 ~ +60	°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	-	35	45	mA	-
Operating current	Iop	-	45	55	mA	Po=5mW
Operating voltage	Vop	-	2.2	2.6	V	Po=5mW
Lasing wavelength		640	655	658	nm	Po=5mW
Beam divergence		7	8	10	deg	Po=5mW
		22	30	38	deg	Po=5mW
Monitor current	Im	100	200	500	µA	Po=5mW