

US-Lasers: 650nm-5mW - Red Laser Diode

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RED LASER DIODE DATA SHEET ABSOLUTE MAXIMUM RATINGS - (Tc=25 °C)

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| <p>TECHNICAL DATA</p> <p>Visible laser diode light output 650nm</p> <p>Optical power output 5mW CW</p> <p>Package Type 5.6mm</p> <p>Built-in photo diode for monitoring laser output</p> | <p>1 laser cathode 2 common case 3 monitor diode anode</p> |
| Pin Out Diagram - Style A | |

| 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 ~ +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 | - | 20 | 40 | mA | - |
| Operating current | Iop | - | 40 | 60 | mA | Po=5mW |
| Operating voltage | Vop | - | 2.7 | - | V | Po=5mW |
| Lasing wavelength | | 645 | 650 | 655 | nm | Po=5mW |
| Beam divergence | | - | 5 | 11 | deg | Po=5mW |
| Beam divergence | | - | 25 | 37 | deg | Po=5mW |
| Monitor current | Is | - | 10 | 20 | uA | Po=5mW |
| Astigmatism | As | - | 11 | - | um | Po=5mW |
| MTTF | | | 10000 hrs | | | Po=5mW |
| Emitter Size | 10 x 60 Microns - Emitter Distance to Cap Lens = 0.3mm | | | | | |
| Structure | Index Guided | | | | | |