

PACKAGE DIMENSIONS 0.200 (5.08) 0.180 (4.57) 0.350 (8.89) 0.040 (1.02) 0.330 (8.38) 1.00 (25.4) MIN 0.050 (1.27) 0.050 (1.27) REF. 0.100 (2.54) -0.100 (2.54) Ø 0.230 (5.84) **FLAT DENOTES** 0.023 (0.58) 0.017 (0.43) SQ. TYP. (2X) CATHODE

SUPER BLUE-GREEN MV8G0X MV8G01 MV8G03

FEATURES

- Popular T-1 3/4 package
- Super high brightness suitable for outdoor applications
- Solid state reliability
- Water clear optics
- Standard 100 mil. lead spacing



NOTES:

- 1. Dimensions for all drawings are in inches (mm).
- 2. Lead spacing is measured where the leads emerge from the package.
- 3. Protruded resin under the flange is 1.5 mm (0.059") max.

DESCRIPTION

This T-1 3/4 super bright LED has a moderate viewing angle of 20° for concentrated light output. It is made with an InGaN LED that emits blue-green light at 502 nm. It is encapsulated in a water clear epoxy lens package.

| ABSOLUTE MAXIMUM RATINGS (T _A = 25°C unless otherwise specified) | | | | |
|-----------------------------------------------------------------------------|------------------|---------------|------|--|
| Parameter | Symbol | Rating | Unit | |
| Operating Temperature | T _{OPR} | -20 to +80 | °C | |
| Storage Temperature | T _{STG} | -30 to +100 | °C | |
| Lead Soldering Time | T _{SOL} | 260 for 5 sec | °C | |
| Continuous Forward Current | I _F | 30 | mA | |
| Peak Forward Current (f = 1.0 KHz, Duty Factor = 1/10) | I _F | 150 | mA | |
| Reverse Voltage | V _R | 5 | V | |
| Power Dissipation | P _D | 120 | mW | |



| SUPER BLUE-GREEN | MV8G0X |
|------------------|--------|
| MV8G01 | |
| MV8G03 | |

| Part Number | MV8G01 | MV8G03 | Condition |
|-------------------------------|--------|--------|------------------------|
| Luminous Intensity (mcd) | | | I _F = 20 mA |
| Minimum | 1500 | 3000 | |
| Typical | 1900 | 3500 | |
| Forward Voltage (V) | | | I _F = 20 mA |
| Maximum | 4.2 | 4.2 | |
| Typical | 3.6 | 3.6 | |
| Wavelength (nm) | | | I _F = 20 mA |
| Peak | 5 | 502 | |
| Dominant | 5 | 505 | |
| Spectral Line Half Width (nm) | | 40 | I _F = 20 mA |
| Viewing Angle (°) | : | 20 | I _F = 20 mA |

TYPICAL PERFORMANCE CURVES

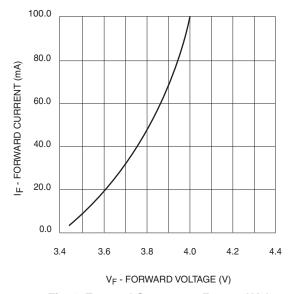


Fig. 1 Forward Current vs. Forward Voltage

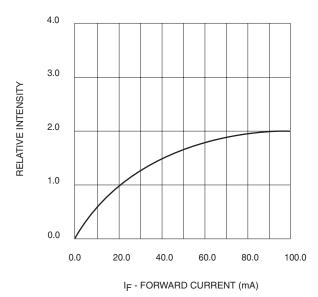


Fig. 2 Relative Luminous Intensity vs.
Forward Current



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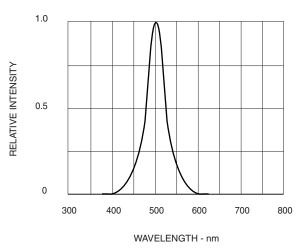
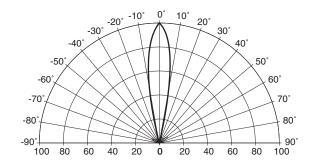


Fig. 3 Relative Luminous Intensity vs. Wavelength



REL. LUMINOUS INTENSITY (%)

Fig. 4 Radiation Diagram



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