Green GaP LED Lamps

Optoelectronic Products

MV5252
MV5253
MV5254

General Description

The MV5252, MV5253 and MV5254 are green light emitting diodes encapsulated in green epoxy. Viewing angle can be selected from point source to wide angle. Visual light emission is in the 530 nm to 590 nm range.

High Luminous Intensity For Ambient Light Levels
Solid State—No Replacement Required
High On/Off Contrast
Flexible Pins On All Lamps
For Good Heat Sinking
For Right-Angle Bending
Fits Standard Sockets or Drilled Holes
Single Molded Body Eliminates Thermal Cycling Problems
Low Power for IC Compatibility
MV5252 For Point Source Lamps
MV5253 For Wide Angle Lamps
MV5254 For Intermediate Dispersion Lamps

Absolute Maximum Ratings

Maximum Temperature and Humidity

Storage Temperature	−55°C to +100°C
Operating Temperature	−55°C to +100°C
Pin Temperature (Soldering, 5 s)	260°C
Relative Humidity at 85°C	85%

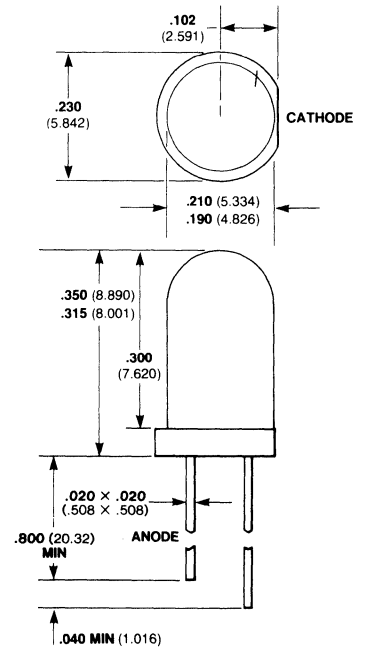
Maximum Power Dissipation

Total Dissipation at T_A = 25°C	105 mW
Derate Linearly from 25°C	1.14 mW/°C

Maximum Voltage and Currents

V_R	Reverse Voltage	5.0 V
I_F	Forward dc Current at T_A = 25°C	35 mA
I_{pk}	Peak Forward Current (1.0 μs pulse width, 0.1% duty cycle)	1.0 A

Package Outline



Notes
All dimensions in inches **bold** and millimeters (parentheses)
Tolerance unless specified = ±.015 (±.381)

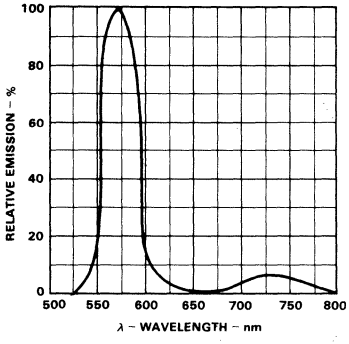
Typical Electrical Characteristics

MV5252
MV5253
MV5254

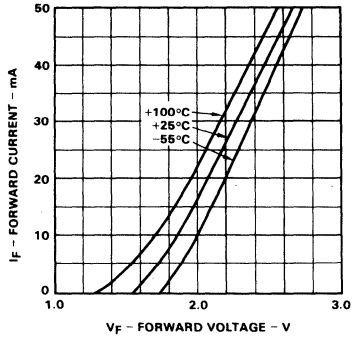
Electrical and Radiant Characteristics $T_A = 25°C$

Symbol	Characteristic	Min	Typ	Max	Units	Test Conditions
V_F	Forward Voltage		2.1	3.0	V	I_F = 20 mA
BV_R	Reverse Breakdown Voltage	5.0	25		V	I_R = 100 μA
I_O	Axial Luminous Intensity				mcd	I_F = 20 mA
	MV5252	2.0	15			
	MV5253	0.8	1.5			
	MV5254	0.9	3.0			
θ	Viewing Angle Total				degrees	I_F = 20 mA
	MV5252		28			
	MV5253		65			
	MV5254		24			
λ_{pk}	Peak Wavelength		565		nm	I_F = 20 mA

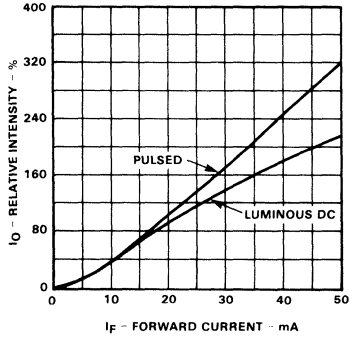
Emission Spectrum



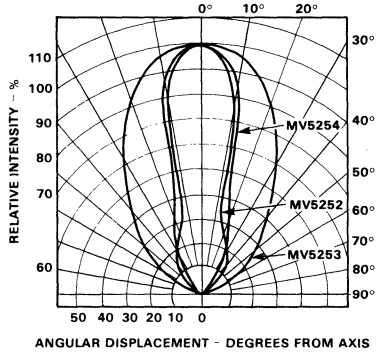
Forward Current vs Forward Voltage



Intensity vs Forward Current



Intensity vs Viewing Angle



Typical Electrical Characteristic Curves

MV5252
MV5253
MV5254

Peak Wavelength vs Temperature