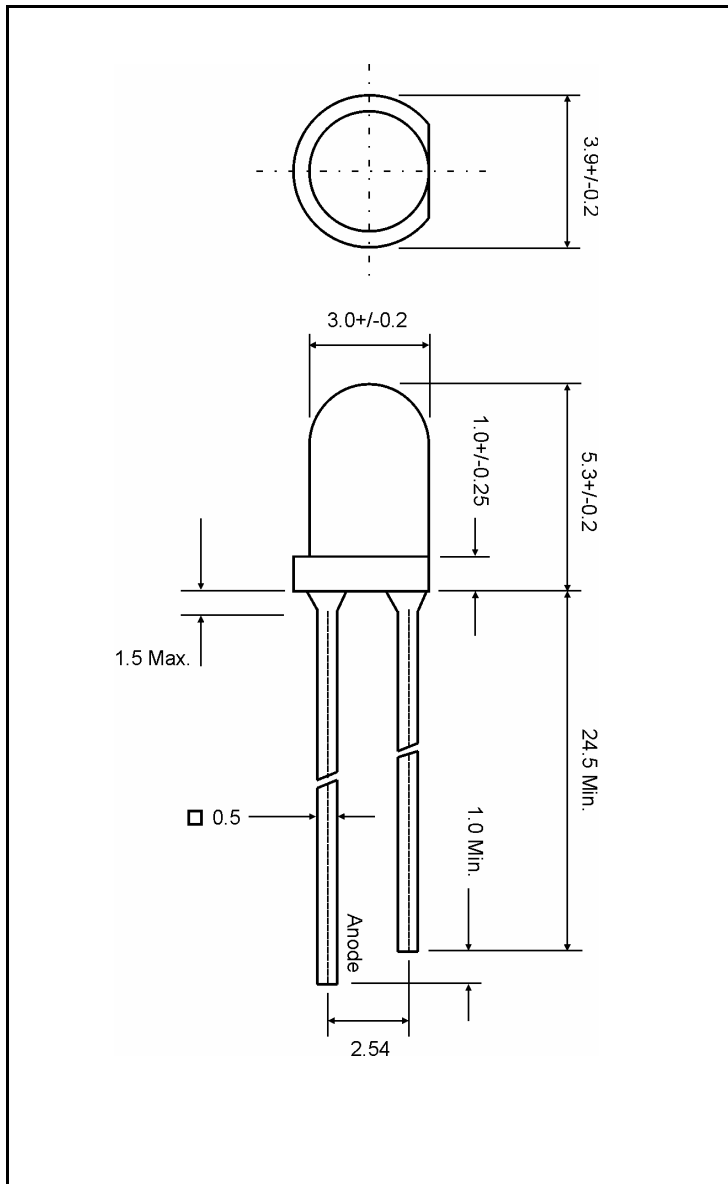


Package Dimensions



Characters

- 3mm Round
- Reliable and Rugged
- Low Power Consumption
- Low Working Current

Functions

- Infrared 940

Notes

- All Dimensions are in millimeters
- Tolerance is ± 0.25 mm unless otherwise noted
- Protruded resin under flange is 1.0mm max.
- Lead measured where the leads emerge from the package
- ESD Class (Mil-Std-883d Method 3015.7) based on Human Body Mode : 1000V (Ave.)

Chip Material	Emitting Color	Lens Color
AlGaAs	Infrared 940	Water Clear



Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	Ee		10		mW/sr	I _F = 20mA
			50			I _F = 100mA#
			500			I _F = 1A#
Viewing Angle *	2θ ^{1/2}		20		Deg.	I _F = 20mA
Peak Wavelength	λ _p		940		nm	
Spectrum Radiation Bandwidth	Δλ		45		nm	
Forward Voltage	V _F		1.5	1.8	V	I _F = 100mA#
			2.2	2.8		
			4.5	6.0		
Optical Rise Time	T _R		940		ns	I _F = 20mA
Optical Fall Time	T _F		940		ns	

* Viewing Angle is defined as the off-axis angle where the Luminous Intensity is 1/2 the peak intensity.

Pulse Width < 100us , Duty < 1%

Absolute Maximum Ratings (Ta=25°C)

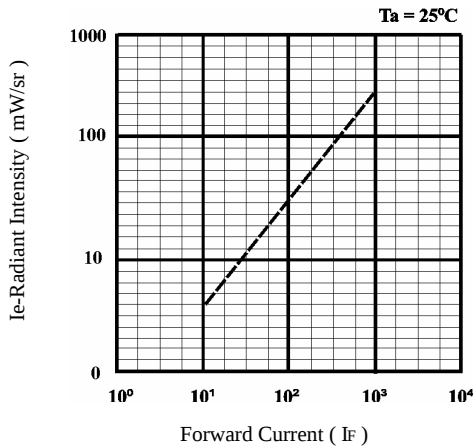
Parameter	Symbol	Max.	Unit
Power Dissipation at Room Temperature	Pd	150	mW
Continuous Forward Current	I _F	100	mA
Peak Forward Current	I _{FP}	1	A
Reverse Voltage	V _R	5	V
Reverse Current	I _R	50	uA
Operation Temperature Range	T _{opr}	+ 80 ~ - 30	Deg.
Storage Temperature Range	T _{stg}	+ 80 ~ - 40	Deg.
Soldering Temperature Range *	T _{sol}	260°C for 5 Seconds	Deg.

Duty Ratio = 1/16 , Pulse width = 0.1ms

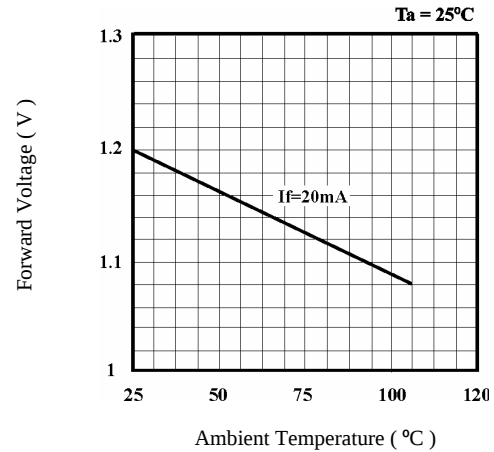
* Lead Soldering Temperature Range (1.6mm from LED Body)

Typical Electro-Optical Characteristics Curves

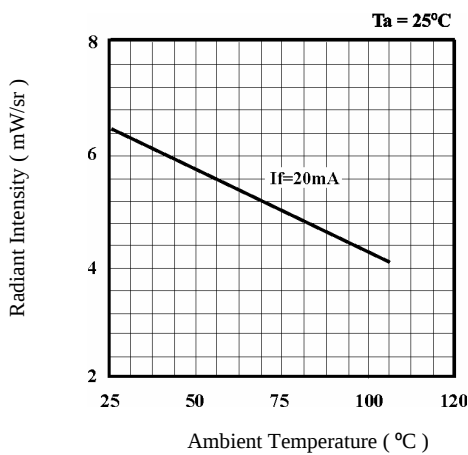
Radiant Intensity VS Forward Current



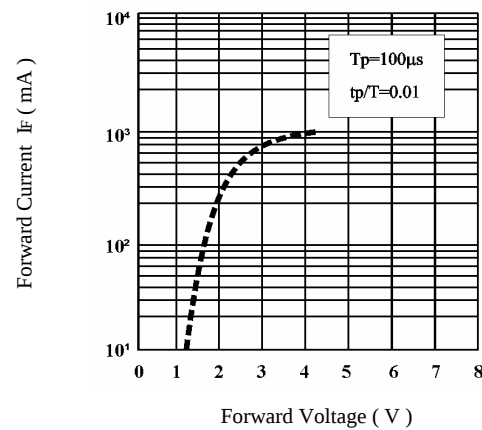
Forward Voltage VS Ambient Temperature



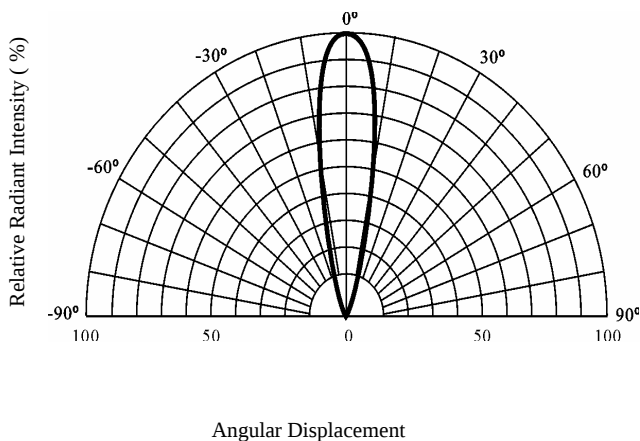
Radiant Intensity VS Ambient Temperature



Forward Current VS Forward Voltage



Relative Radiant Intensity VS Angular Displacement



Spectral Distribution

