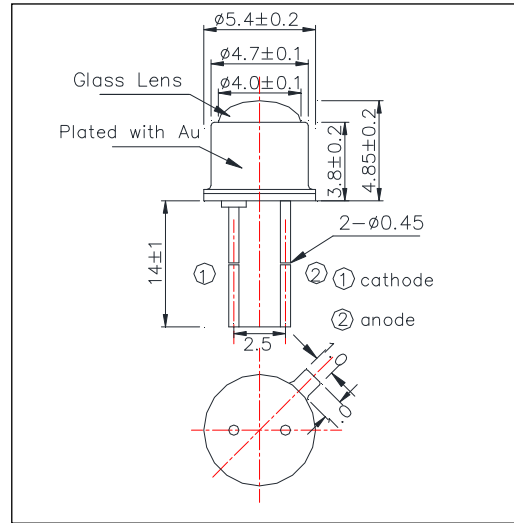


**L1050-35K42**  
Stem Type LED Lamp

<Specifications>

- Chip Material: InGaAsP
- Chip Dimension: 300um x 300um
- Number of Chips: 1pcs
- Peak Wavelength: 1050nm Typ.
- Stem: TO-46 type
- Lens: Unspherical Glass
- Cap: Gold Plated

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Tc=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	130	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	1000	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	120	°C
Thermal Resistance	Rthja	300	K/W
Operating Temperature	TOPR	-40 ~ +85	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature**	TSOL	250	°C

\* Duty=1% and Pulse Width=10μs.

\*\* Soldering condition must be completed within 5 second at 250 °C. and is allowed in the area apart 3mm from the bottom of the lamp.

Electro-Optical Characteristics[Tc=25°C]						
Item	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	VF	IF=50mA		1.2	1.3	V
	VFP	IPF=1A		1.9		
Total Radiated Power*	PO	IF=50mA		5.2		mW
		IPF=1A		31		
Radiant Intensity**	IE	IF=50mA		27		mW/sr
		IPF=1A		160		
Peak Wavelength	λP	IF=50mA	1000		1100	nm
Half Width	Δλ	IF=50mA		50		nm
Viewing Half Angle	θ1/2	IF=50mA		±12		deg
Rise Time	tr	IF=50mA		80		ns
Fall Time	tf	IF=50mA		30		ns

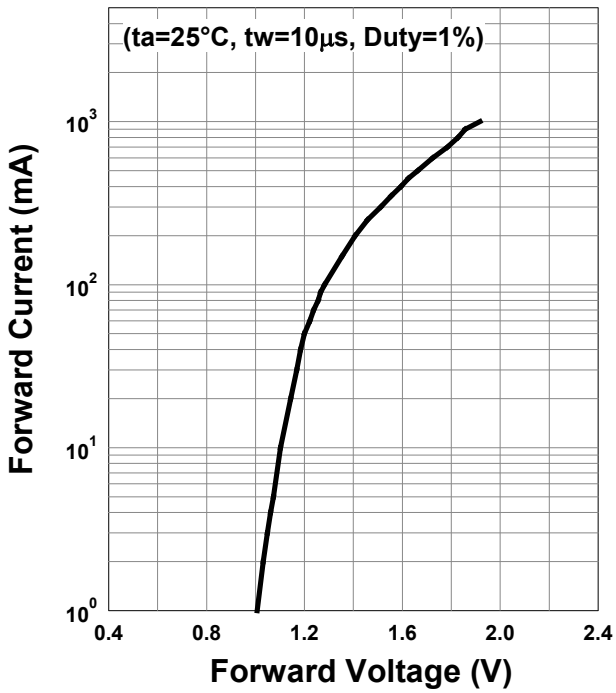
\* Measured by G8370-85

\*\* Measured by Ando Optical Multi Meter AQ2140&AQ2742

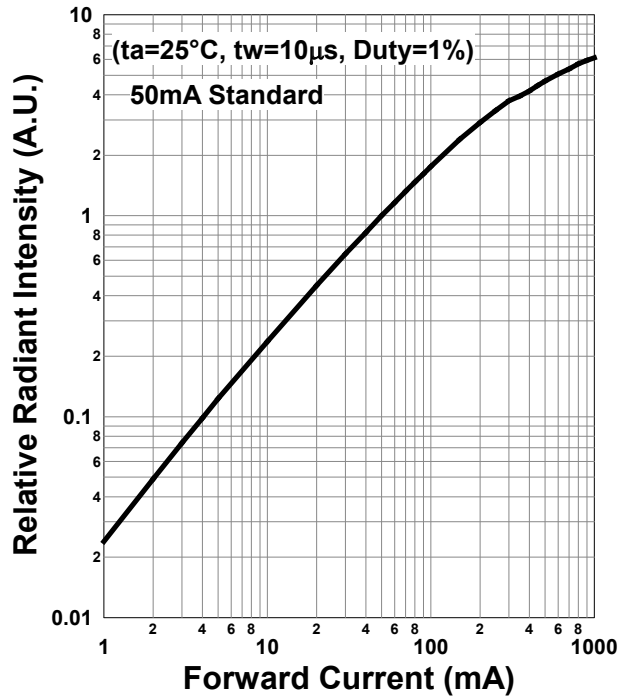


Typical Characteristic Curves

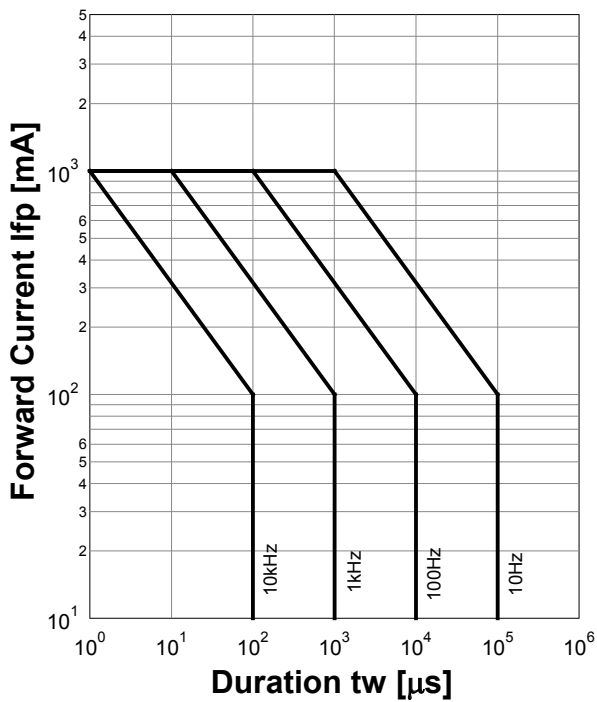
Forward Current - Forward Voltage



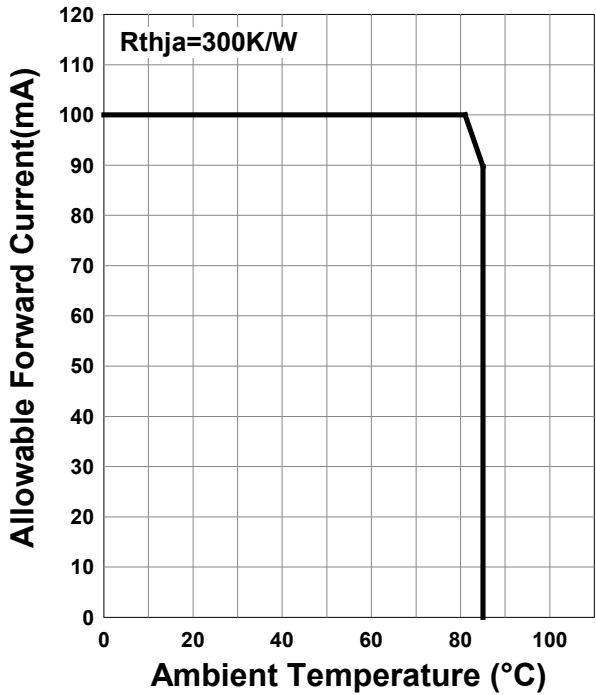
Relative Radiant Intensity - Forward Current



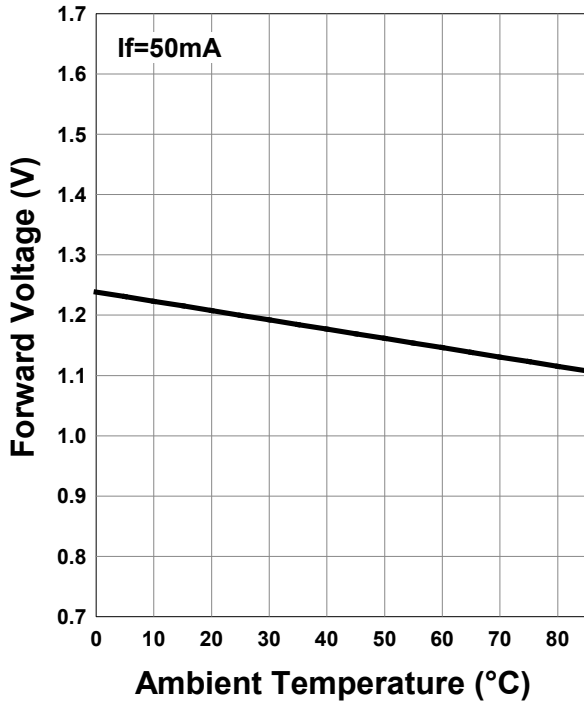
Forward Current - Pulse Duration



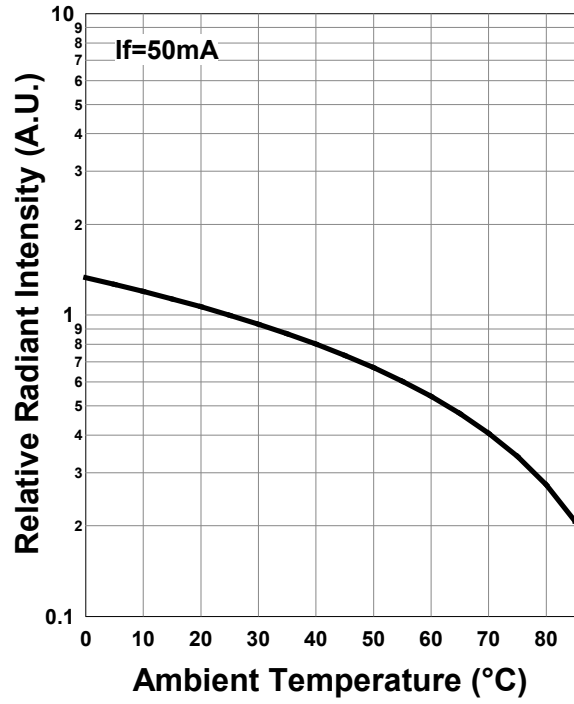
Allowable Forward Current - Ambient Temperature



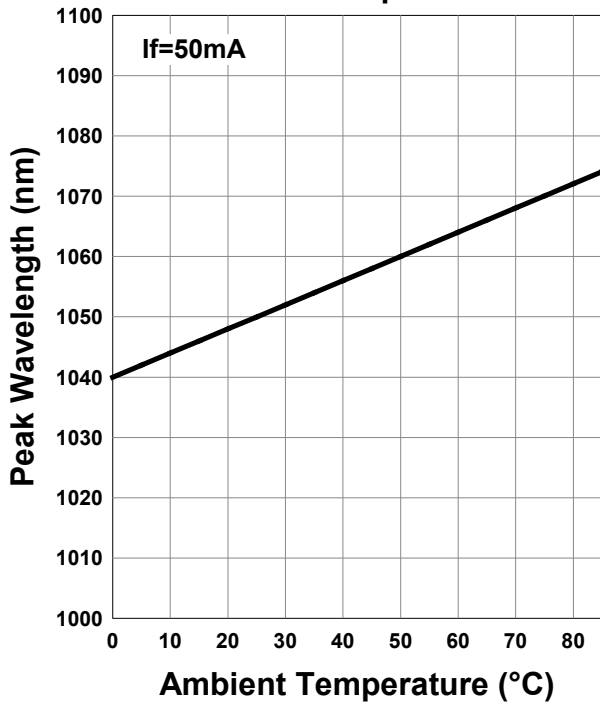
**Forward Voltage - Ambient Temperature**



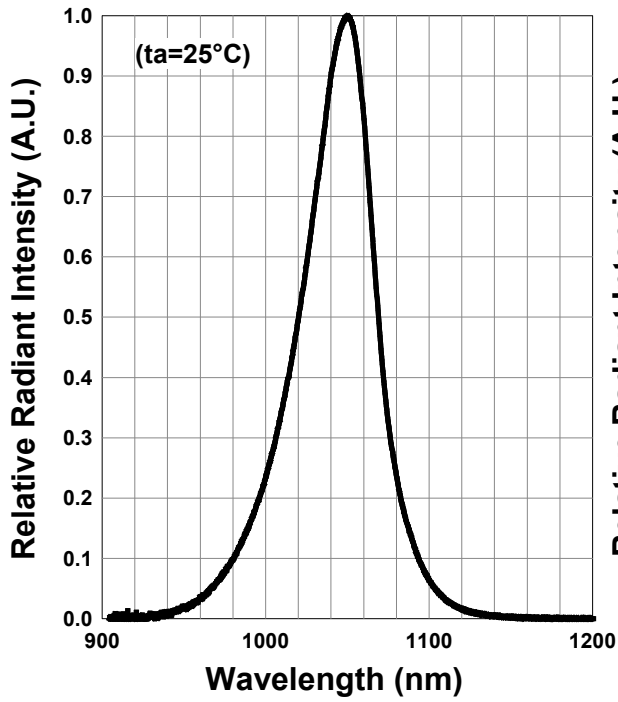
**Relative Radiant Intensity - Ambient Temperature**



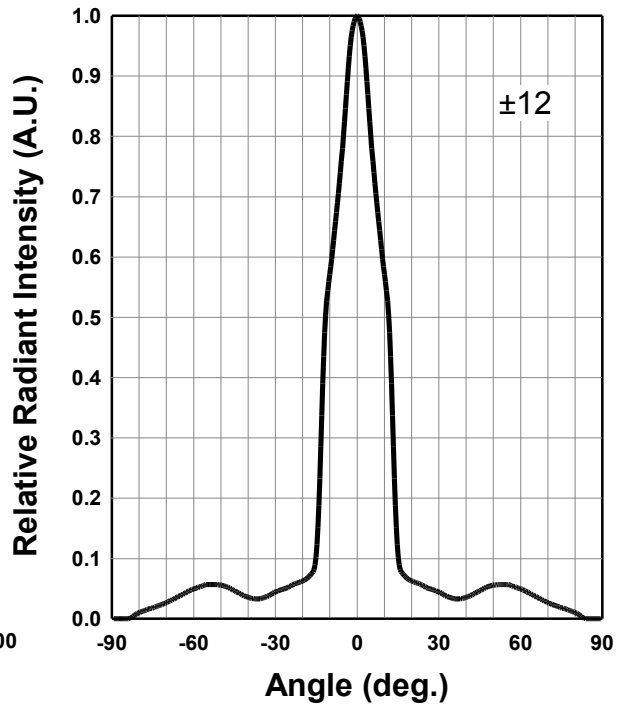
**Peak Wavelength - Ambient Temperature**



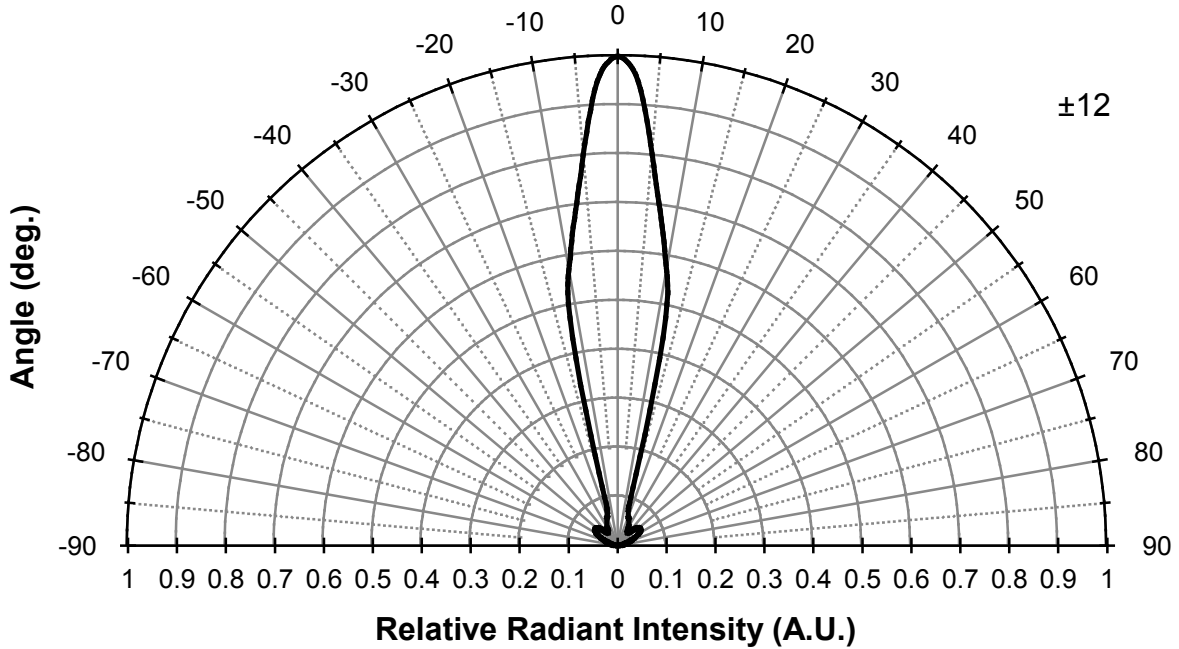
**Relative Spectral Emission**



**Radiation Characteristics**



**Radiation Characteristics**



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Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements.

Product data and parameters may vary by user application and over time.

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