

L735-33AU

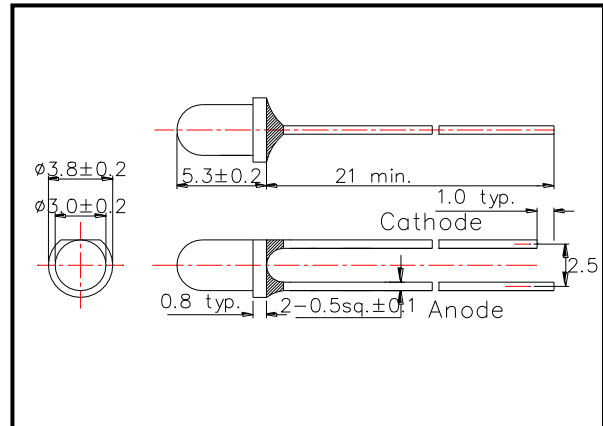
Infrared LED Lamp

L735-33AU is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias it emits a spectral band of radiation, which peaks at 735nm.

◆ Specifications

- 1) Product Name Infrared LED Lamp
- 2) Type No. L735-33AU
- 3) Chip
 - (1) Chip Material AlGaAs
 - (2) Chip Active Area 400um x 400um
 - (3) Peak Wavelength 735nm typ.
- 4) Package
 - (1) Type Φ3mm clear molding
 - (2) Resin Material Epoxy Resin
 - (3) Lead Frame Soldered (Lead Frame)

◆ Outer dimension (Unit: mm)



◆ Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	P _D	150	mW
Forward Current	I _F	75	mA
Pulse Forward Current	I _{FP}	500	mA
Reverse Voltage	V _R	5	V
Thermal Resistance	R _{thja}	240	K/W
Junction Temperature	T _j	120	°C
Operating Temperature	T _{OPR}	-40 ~ +100	°C
Storage Temperature	T _{STG}	-40 ~ +100	°C
Soldering Temperature	T _{SOL}	250	°C

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 250°C

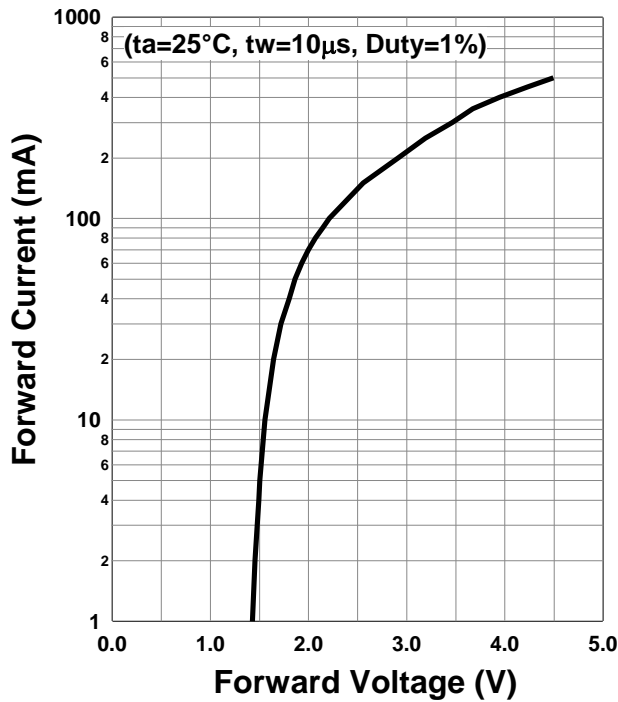
◆ Electro-Optical Characteristics [Ta=25°C typ.]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.85	2.00	V
Radiated Power	P _O	I _F =50mA	18	25		mW
Total Radiated Power	I _E	I _F =50mA	45	70		mcd
Peak Wavelength	λ _P	I _F =50mA	720	735	750	nm
Half Width	Δλ	I _F =50mA		25		nm
Viewing Half Angle	θ _{1/2}	I _F =50mA		±16		deg.
Rise Time	t _r	I _F =50mA		35		ns
Fall Time	t _f	I _F =50mA		60		ns

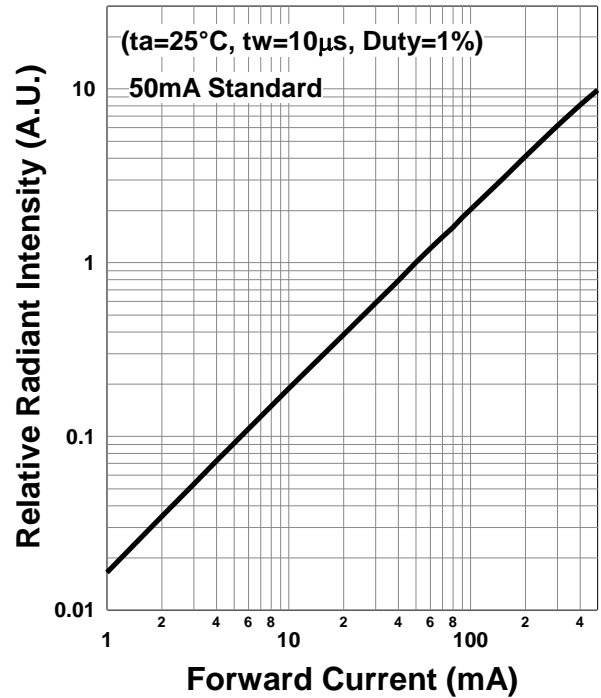
‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by CIE127-2007 Condition B.

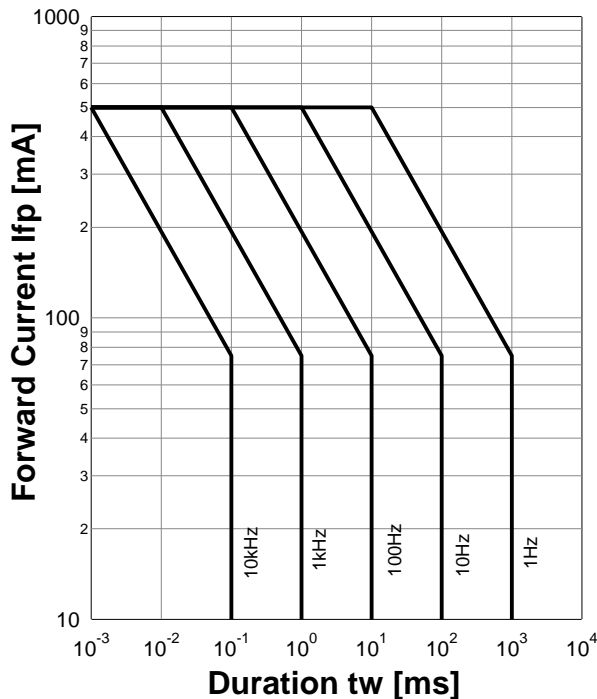
Forward Current - Forward Voltage



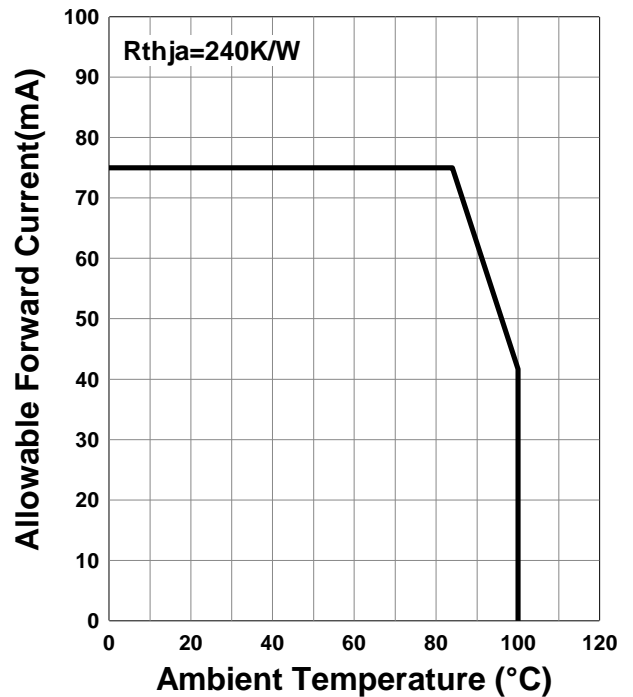
Relative Radiant Intensity - Forward Current



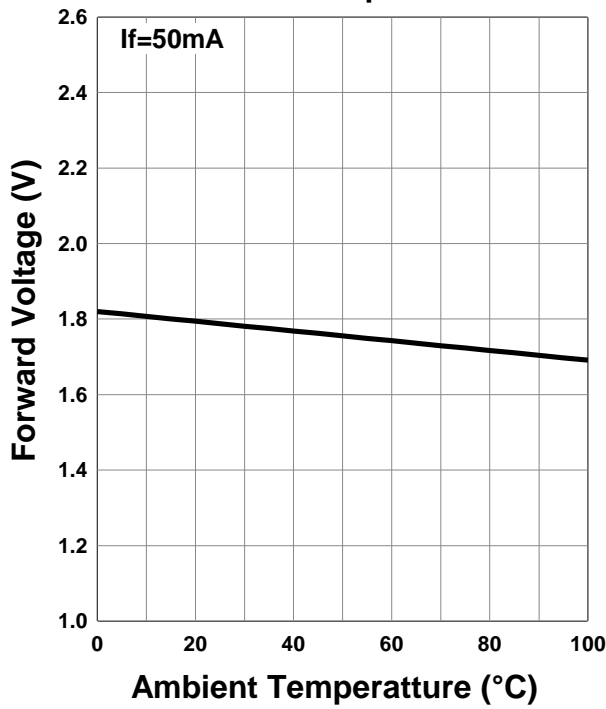
Forward Current - Pulse Duration



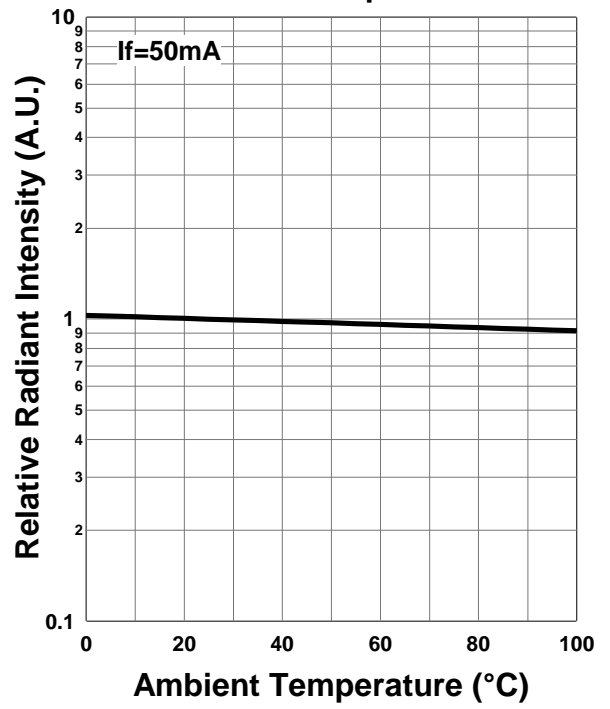
Allowable Forward Current - Ambient Temperature



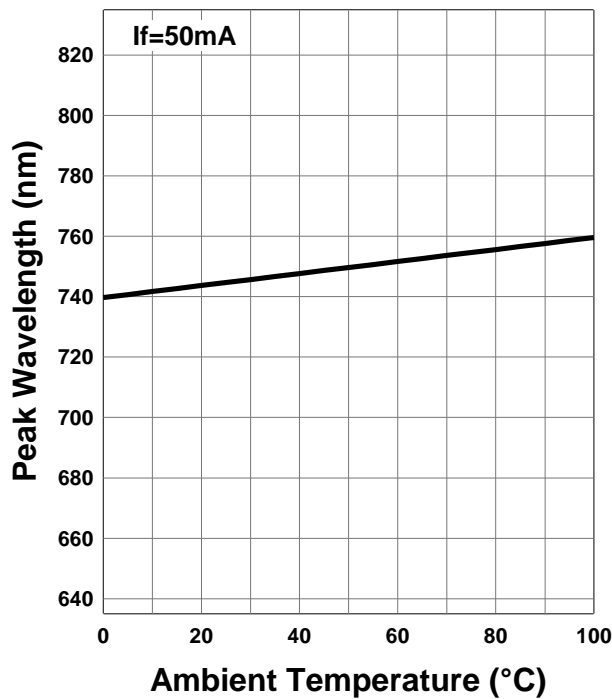
Forward Voltage - Ambient Temperature



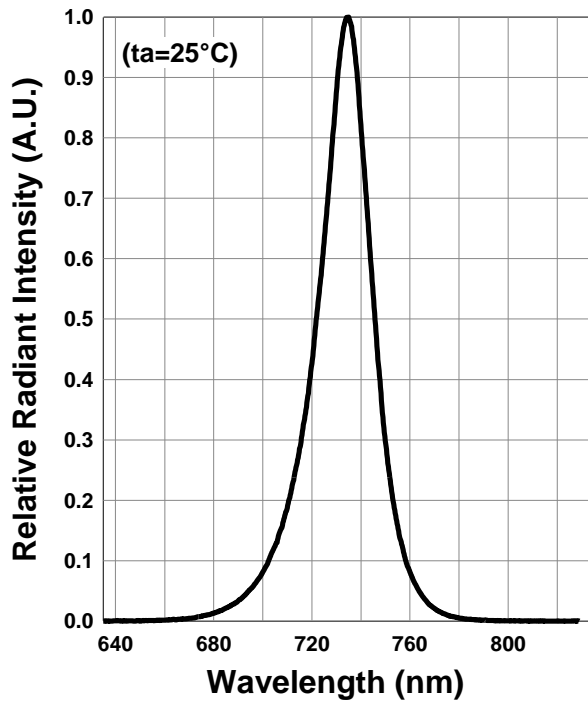
Relative Radiant Intensity - Ambient Temperature



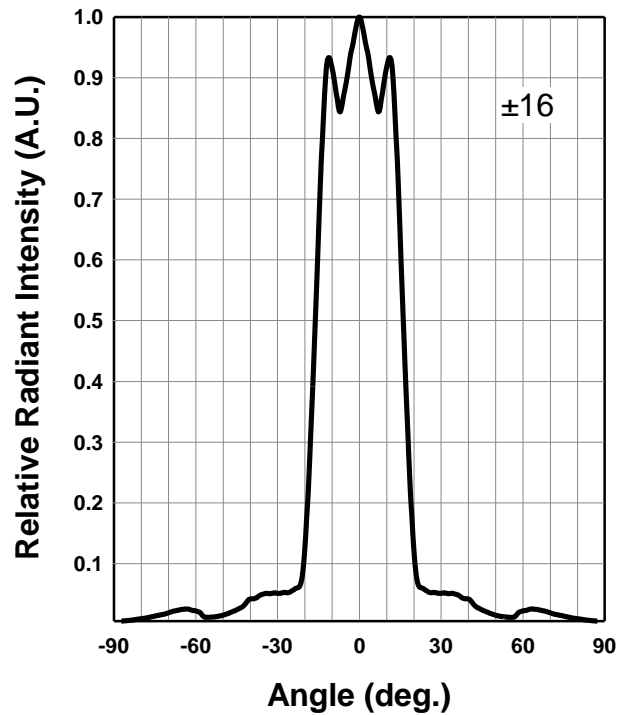
Peak Wavelength - Ambient Temperature



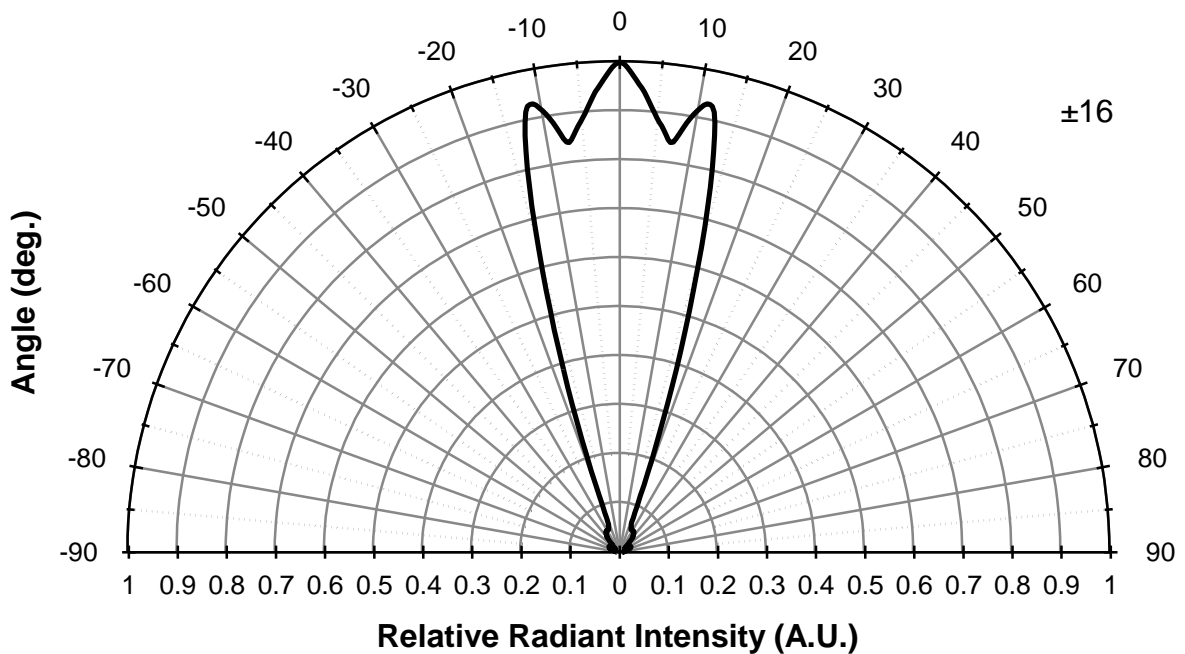
Relative Spectral Emission



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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