Lead (Pb) Free Product – RoHS Compliant

L735-04AU

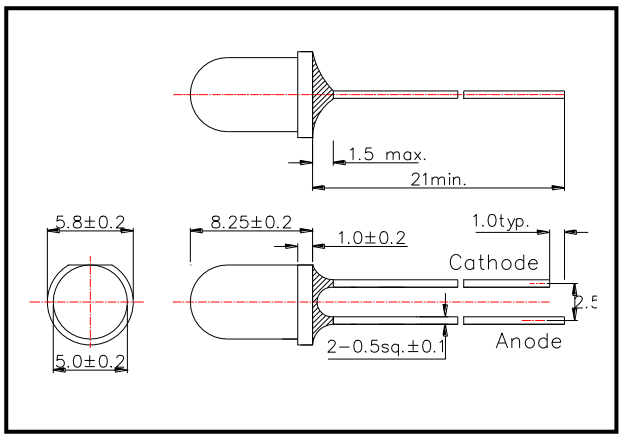
Infrared LED Lamp

L735-04AU 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. L735-04AU
3) Chip
(1) Chip Material AlGaAs
(2) Chip Active Area 400um x 400um
(3) Peak Wavelength 735nm typ.
4) Package
(1) Type Φ 5mm 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

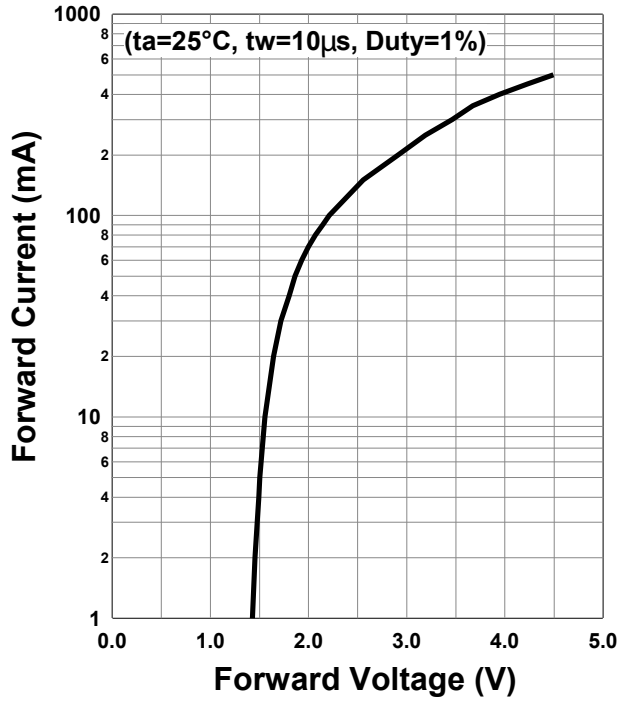
‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.
‡Soldering condition: Soldering condition must be completed within 3 seconds at 250°C

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

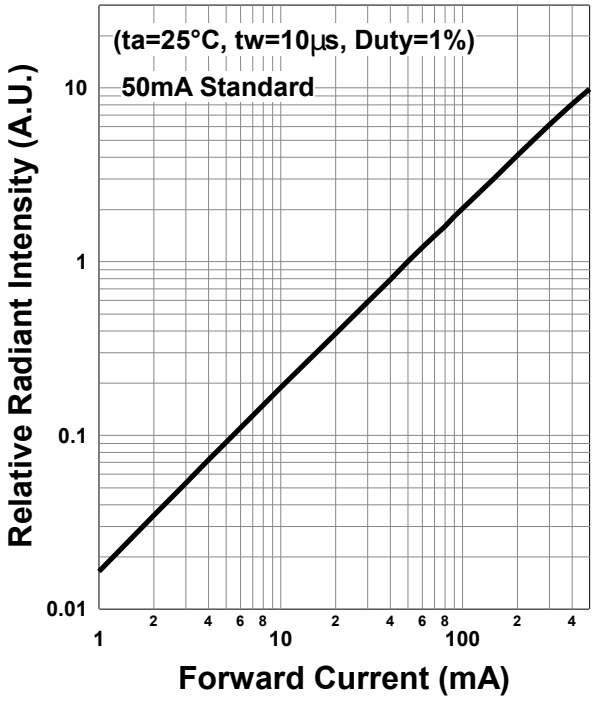
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	IF=50mA		1.85	2.00	V
Radiated Power	P_O	IF=50mA	18	25		mW
Total Radiated Power	I_E	IF=50mA	30	42		mcd
Peak Wavelength	λ_P	IF=50mA	720	735	750	nm
Half Width	$\Delta\lambda$	IF=50mA		25		nm
Viewing Half Angle	$\theta 1/2$	IF=50mA		±19		deg.
Rise Time	tr	IF=50mA		35		ns
Fall Time	tf	IF=50mA		60		ns

‡Radiated Power is measured by S3584-08.
‡Radiant Intensity is measured by CIE127-2007 Condition B.

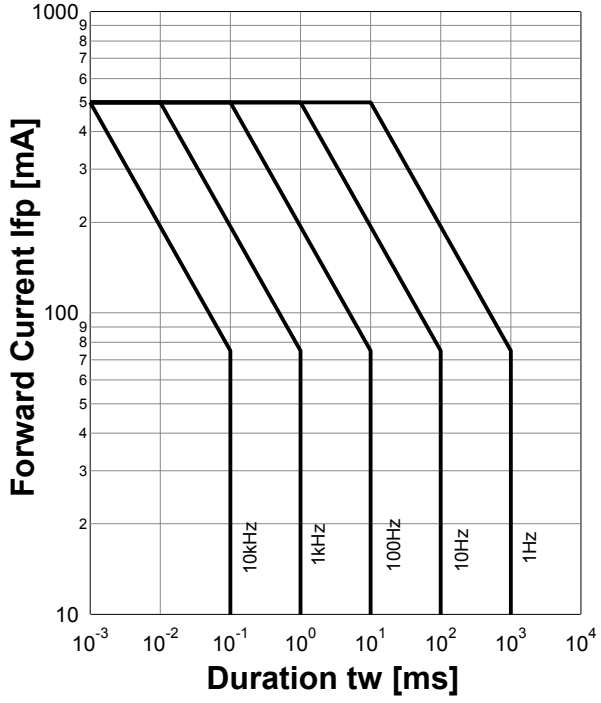
Forward Curent - Forward Voltage



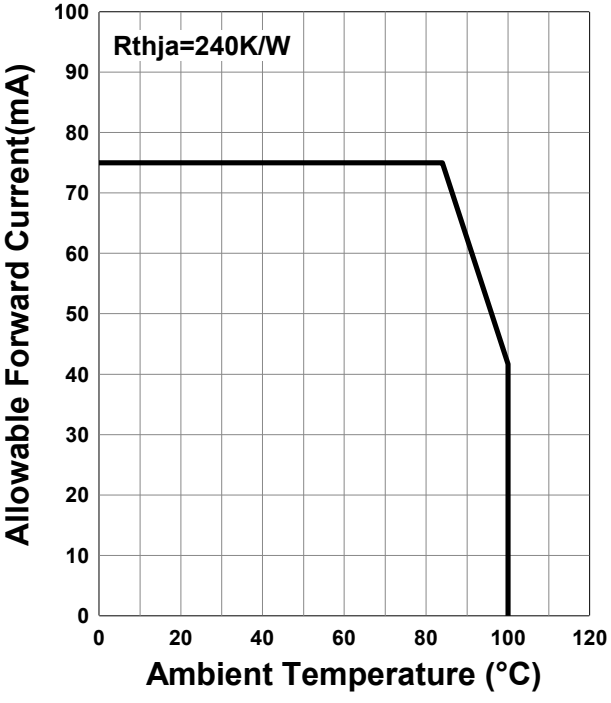
Relative Radiant Intensity - Forward Current



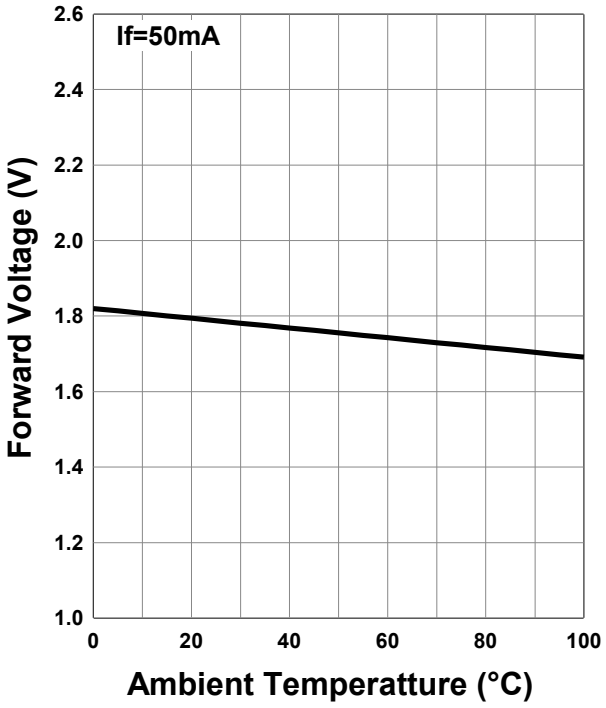
Forward Current - Pulse Duration



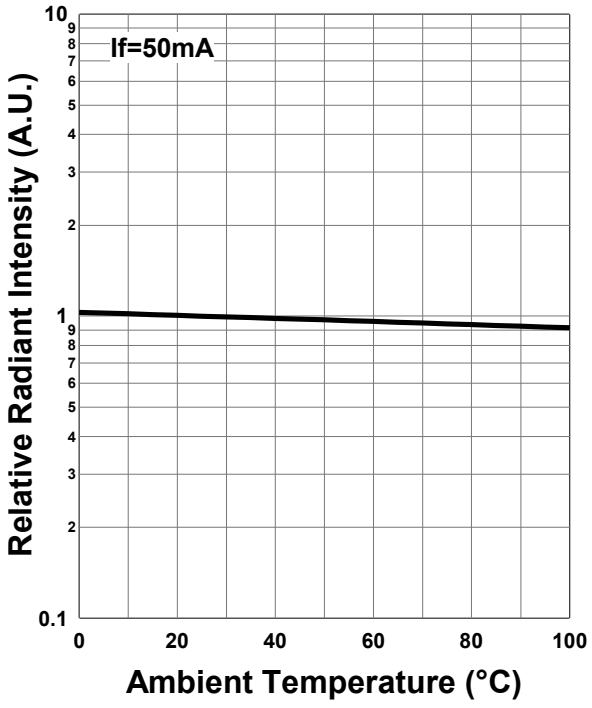
Allowable Forward Current - Ambient Temperature



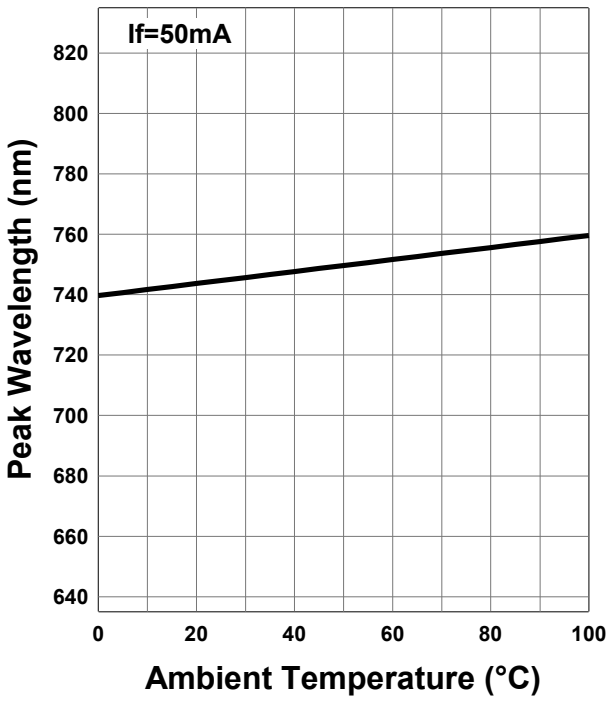
Forward Voltage - Ambient Temperture



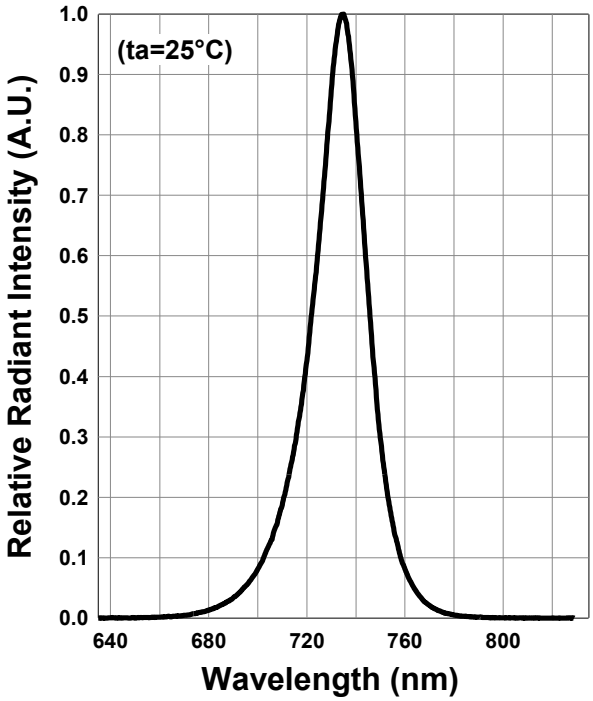
Relative Radiant Intensity - Ambient Temperature



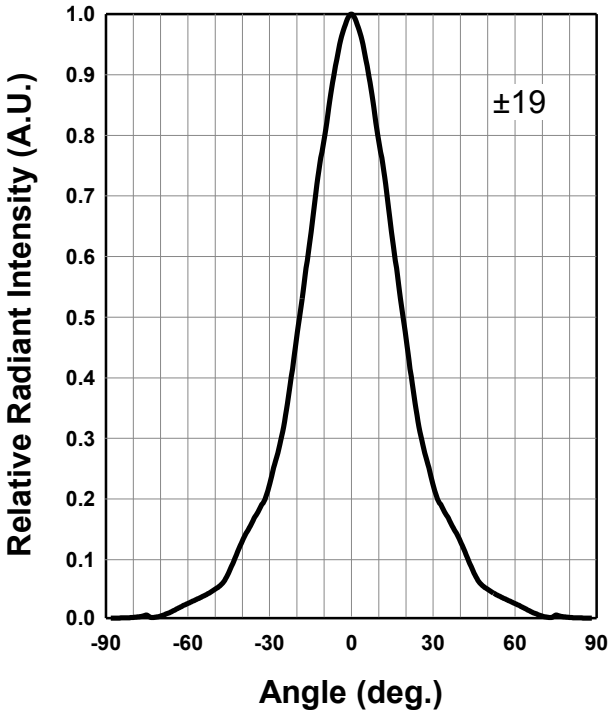
Peak Wavelength - Ambient Temperature



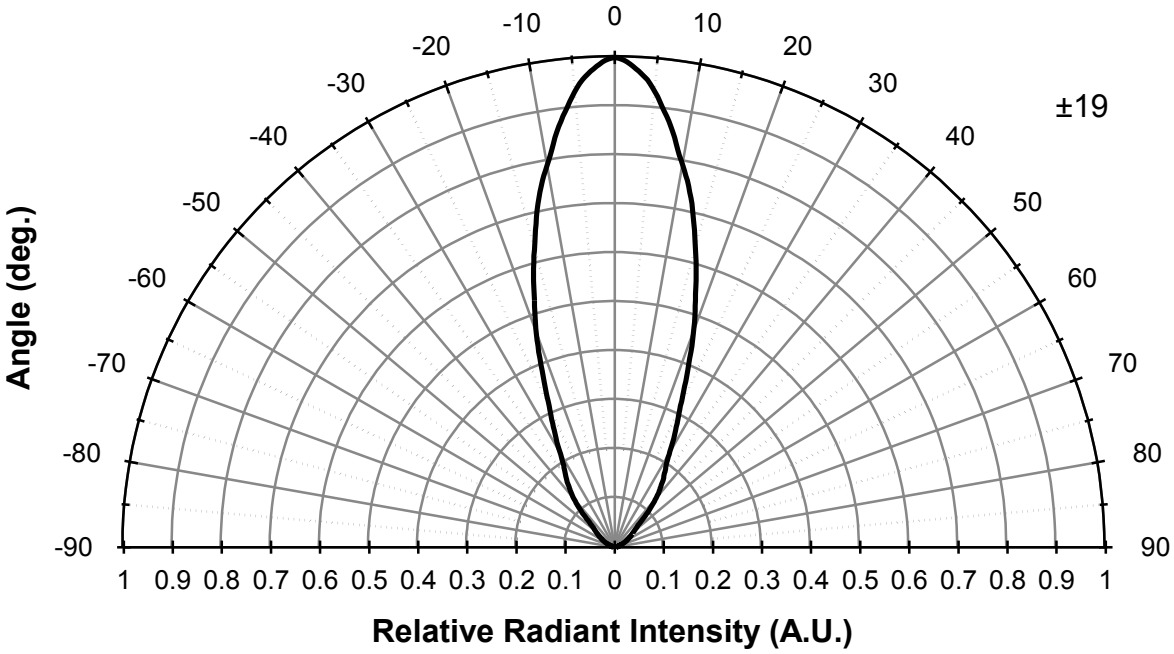
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



Disclaimer

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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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