Lead (Pb) Free Product – RoHS Compliant

L735-03AU

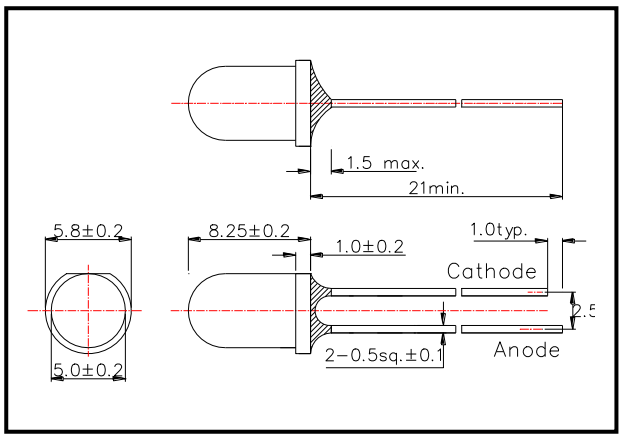
Infrared LED Lamp

L735-03AU 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.	L735-03AU
3)	Chip	
(1)	Chip Material	AlGaAs
(2)	Chip Active Area	400um x 400um
(3)	Peak Wavelength	735nm typ.
4)	Package	
(1)	Type	Φ5mm 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

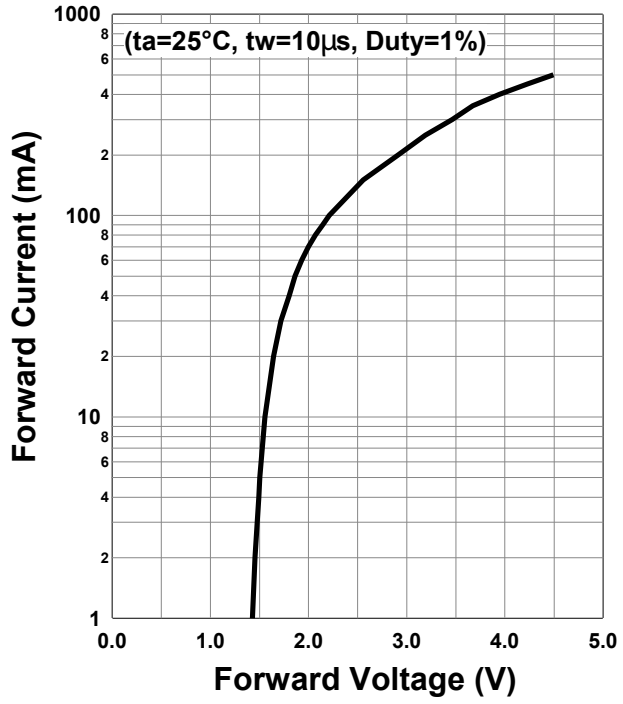
‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.
‡Soldering condition: Soldering condition must be completed within 3 seconds at 250°C

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

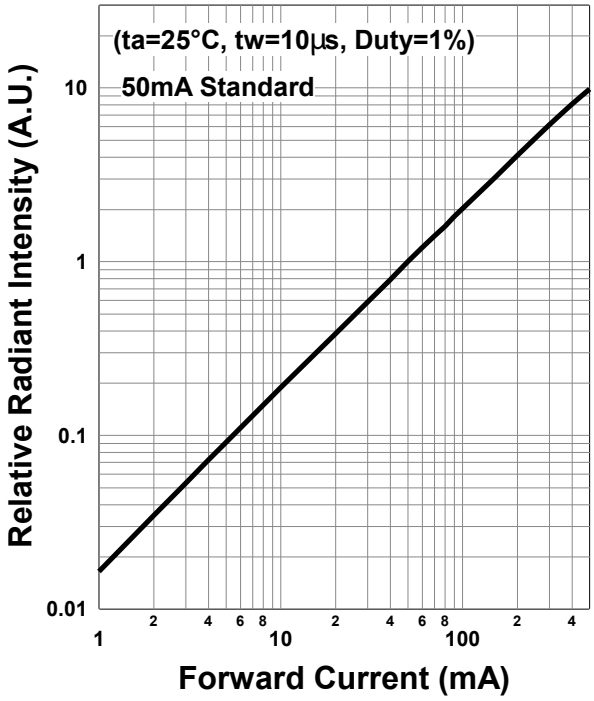
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	IF=50mA		1.85	2.00	V
Radiated Power	P_O	IF=50mA	18	25		mW
Total Radiated Power	I_E	IF=50mA	72	100		mcd
Peak Wavelength	λ_P	IF=50mA	720	735	750	nm
Half Width	$\Delta\lambda$	IF=50mA		25		nm
Viewing Half Angle	$\theta 1/2$	IF=50mA		±8		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.

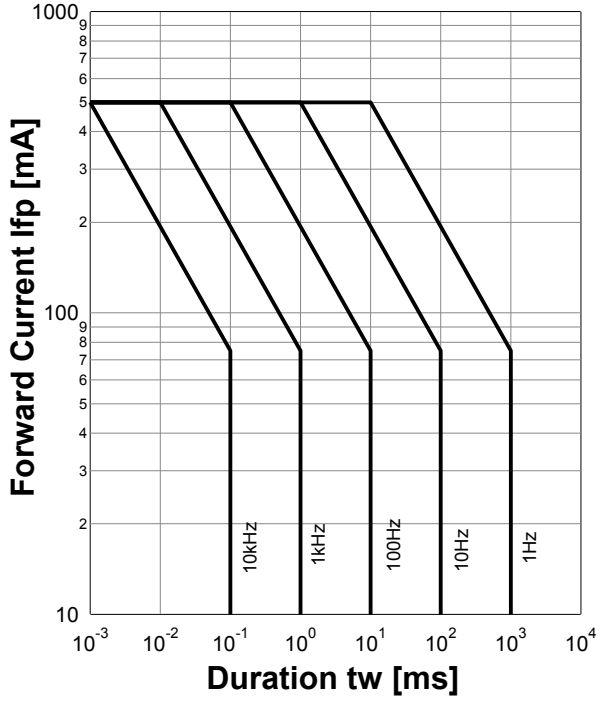
Forward Curent - Forward Voltage



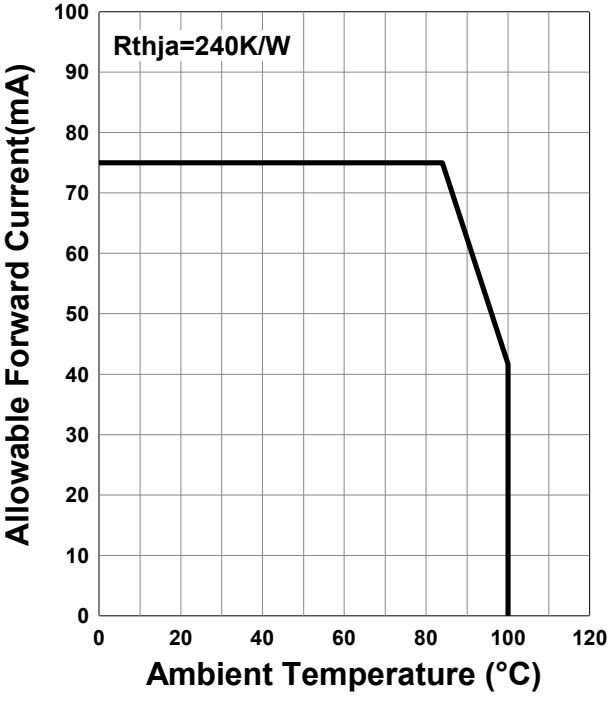
Relative Radiant Intensity - Forward Current



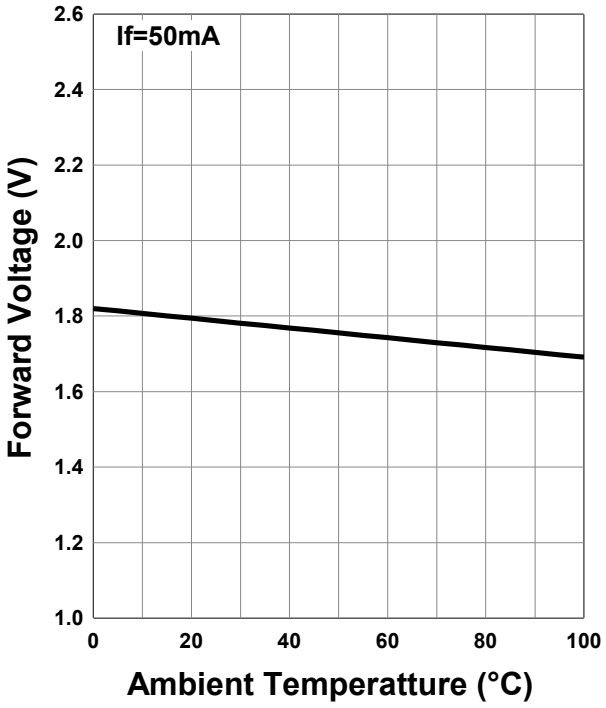
Forward Current - Pulse Duration



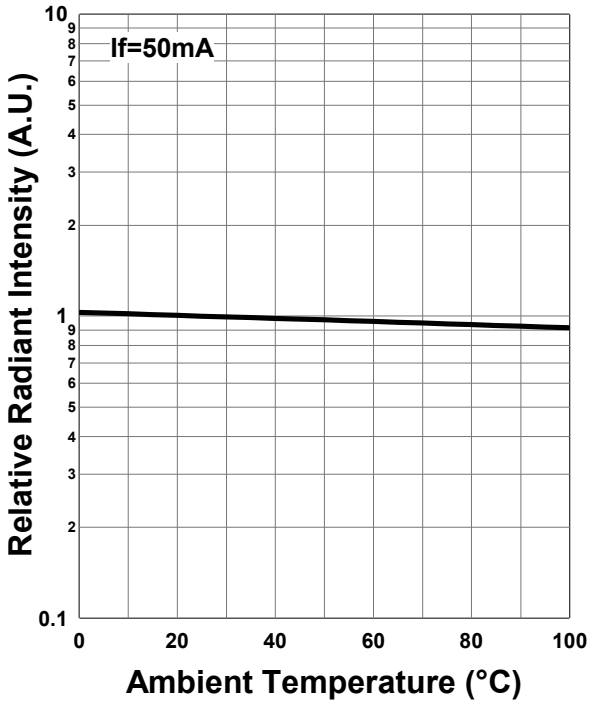
Allowable Forward Current - Ambient Temperature



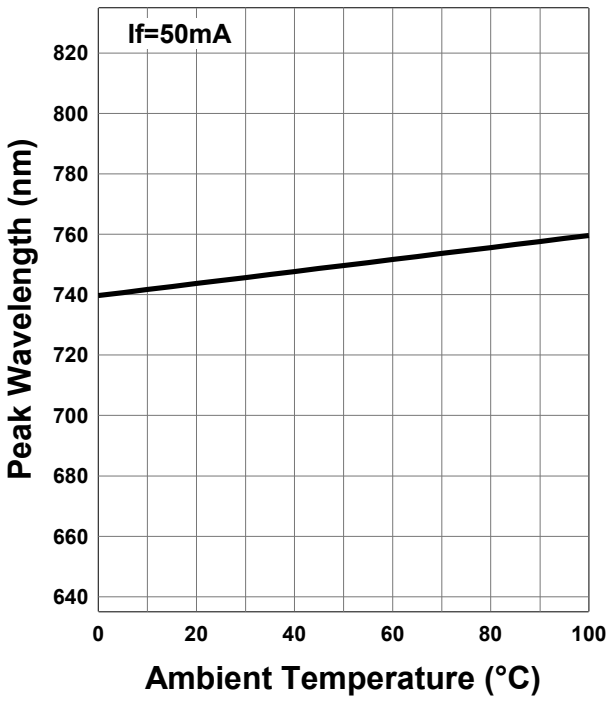
Forward Voltage - Ambient Temperture



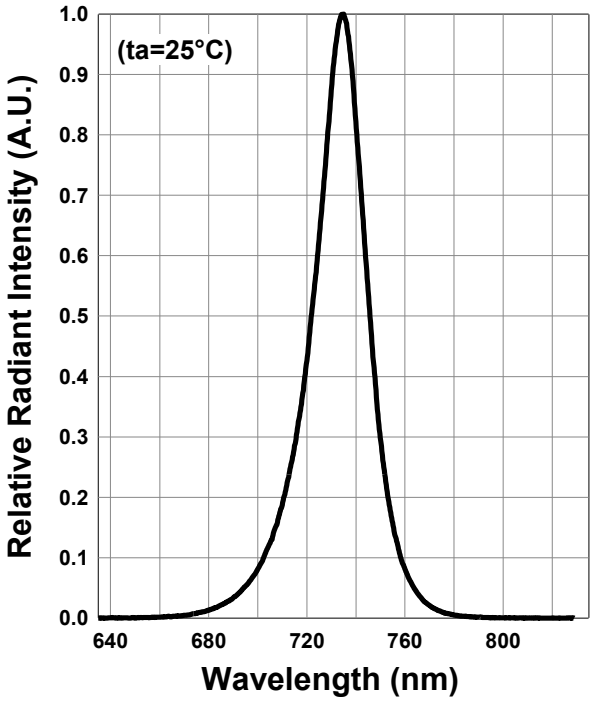
Relative Radiant Intensity - Ambient Temperature



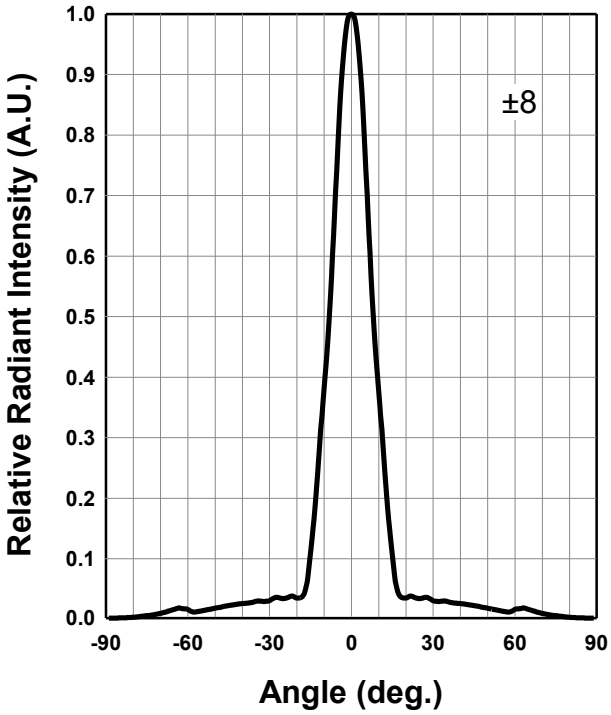
Peak Wavelength - Ambient Temperature



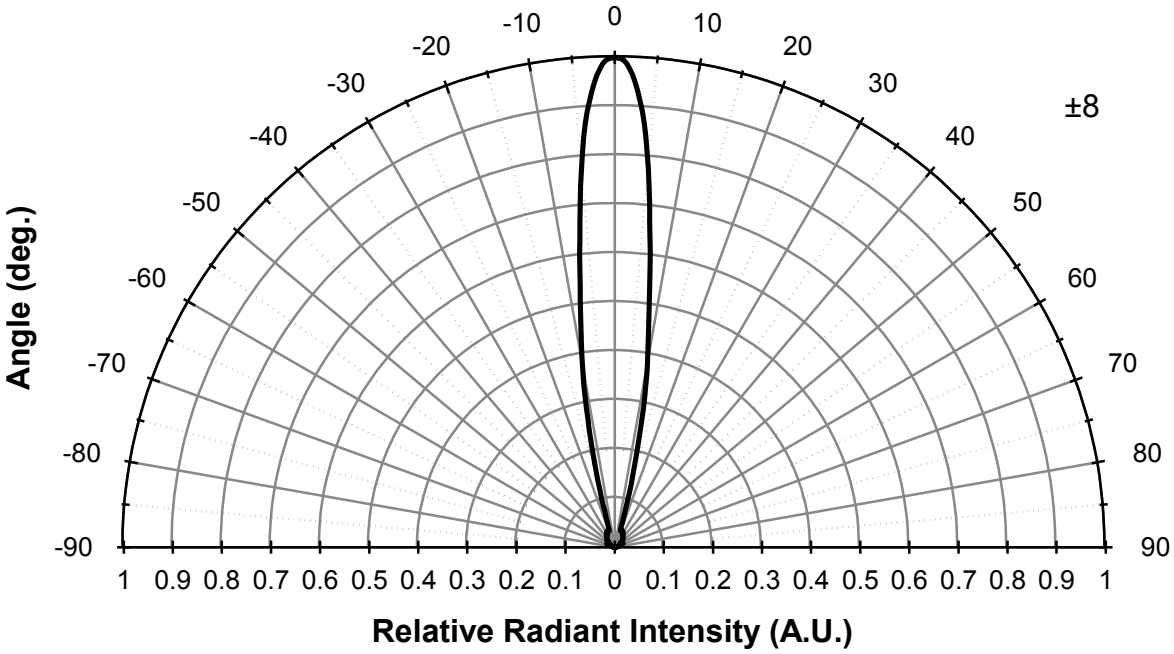
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

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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