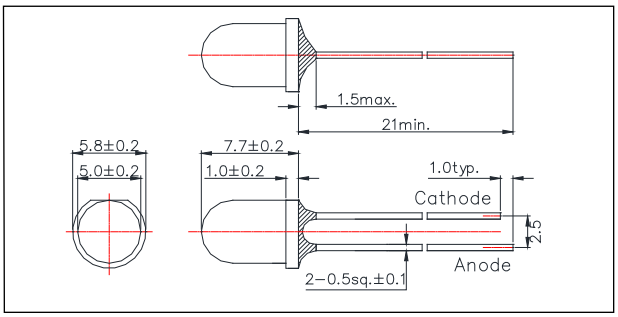
L760-04AU

Infrared LED Lamp

<Specifications>

- Chip Material: AlGaAs
- Chip DimensionL 400um x 400um
- Number of Chips: 1pcs
- Peak Wavelength: 760nm typ.
- Package Type: Φ5mm Clear Molding
- Lead Frame: Soldered (Lead Free)
- Lens: Epoxy Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25℃]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	220	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	500	mA
Reverse Voltage	VR	5	V
Junction Temperature	Tj	120	℃
Thermal Resistance	Rthjp	210	K/W
Operating Temperature	TOPR	-40 ~ +100	℃
Storage Temperature	TSTG	-40 ~ +100	℃
Soldering Temperature**	TSOL	265	℃

* Duty=1% and Pulse Width=10us.
** Soldering condition must be completed within 3 second at 265 ℃.

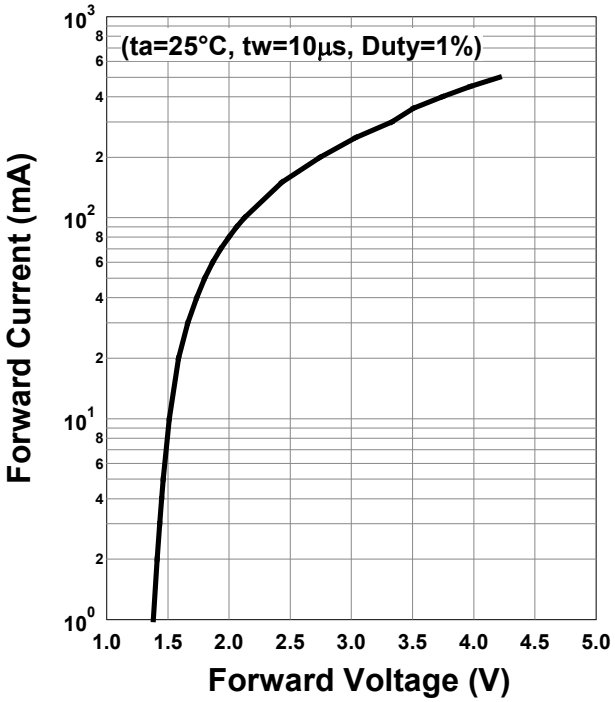
Electro-Optical Characteristics [Tc=25℃]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.8	2.0	V
	VFP	IFP=500mA		3.7		
Total Radiated Power*	PO	IF=50mA		27		mW
		IFP=500mA		260		
Radiant Intensity**	IE	IF=50mA		59		mW/sr
		IFP=500mA		580		
Peak Wavelength	λP	IF=50mA	740		760	nm
Half Width	Δλ	IF=50mA		25		nm
Viewing half Angle	θ1/2	IF=50mA		±25		deg
Rise Time	tr	IF=50mA		10		ns
Fall Time	tf	IF=50mA		20		ns

* Measured by S3584-08
** Measured by CIE127-2007 Condition B

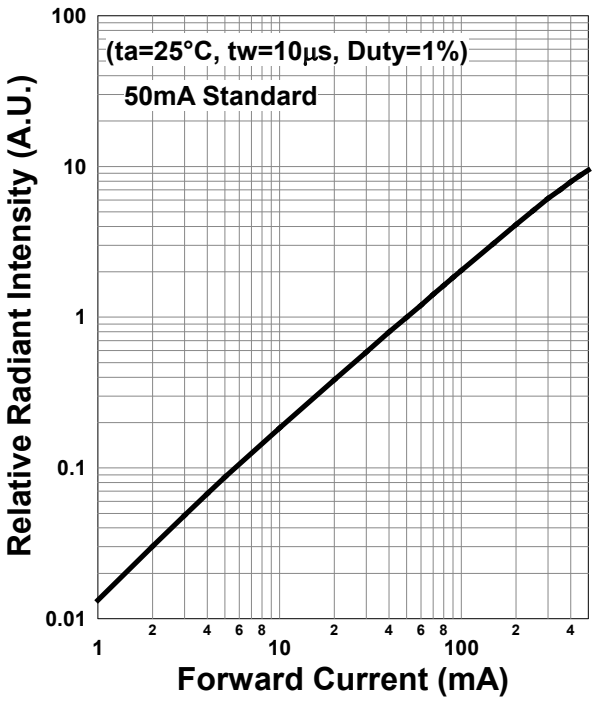
RoHS Compliant

Typical Characteristic Curves

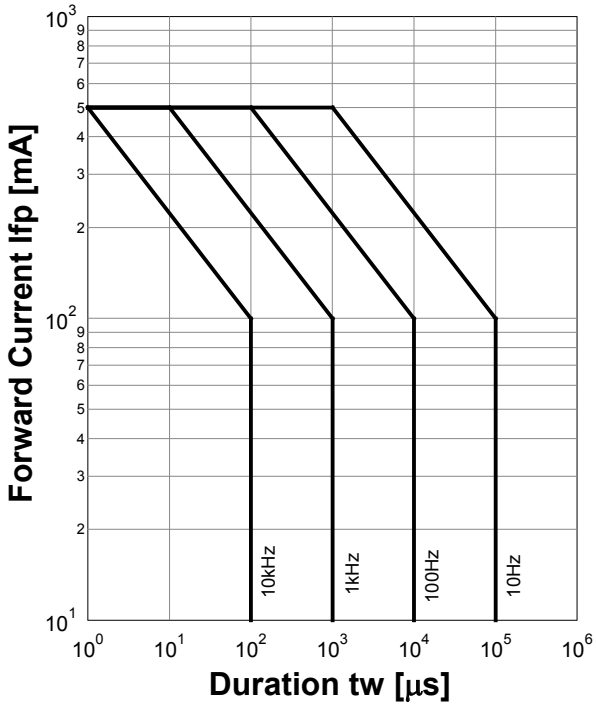
Forward Curent - Forward Voltage



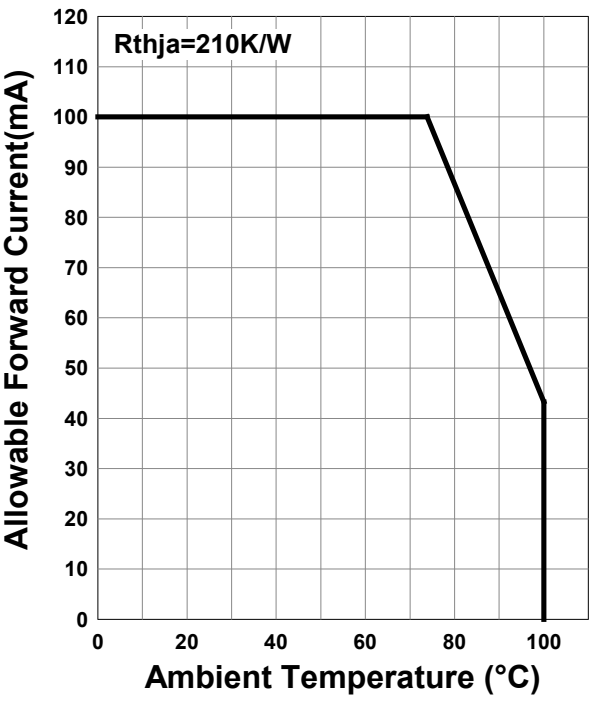
Relative Radiant Intensity - Forward Current

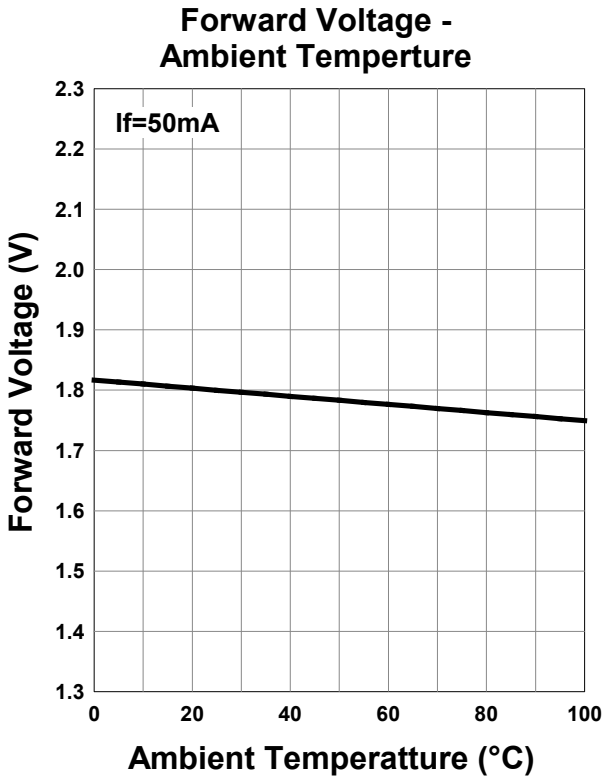


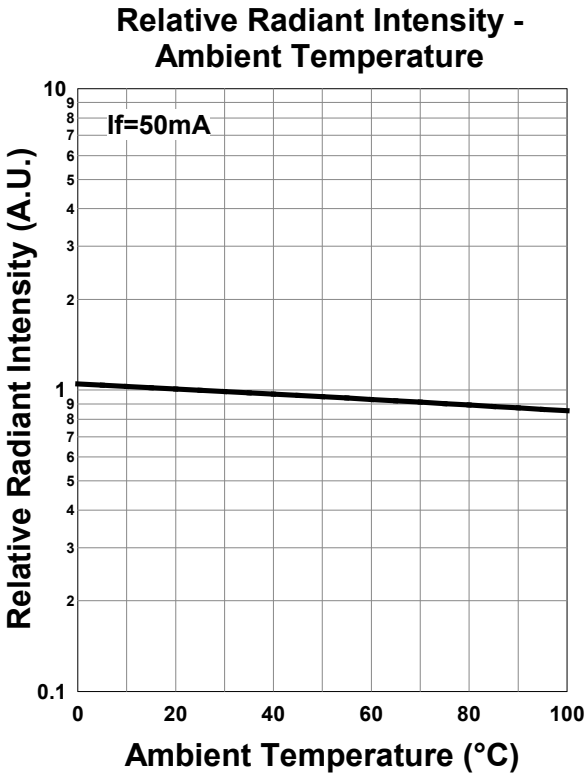
Forward Current - Pulse Duration

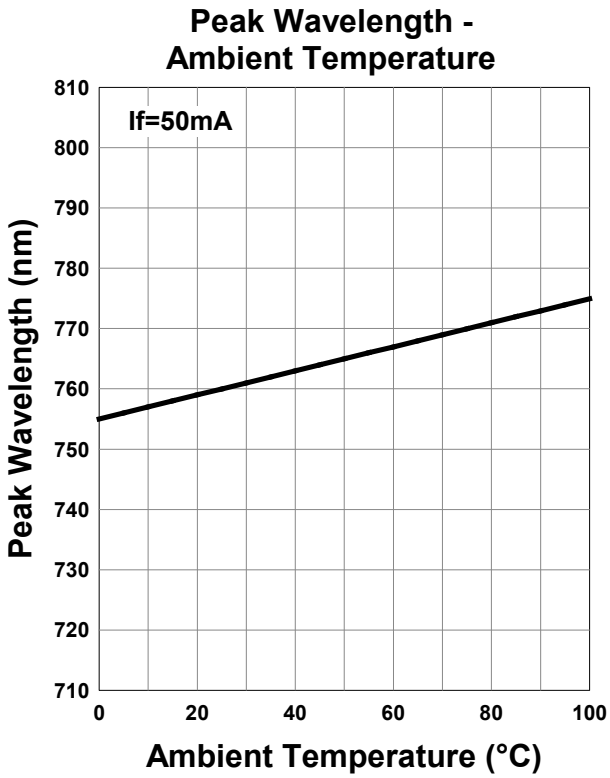


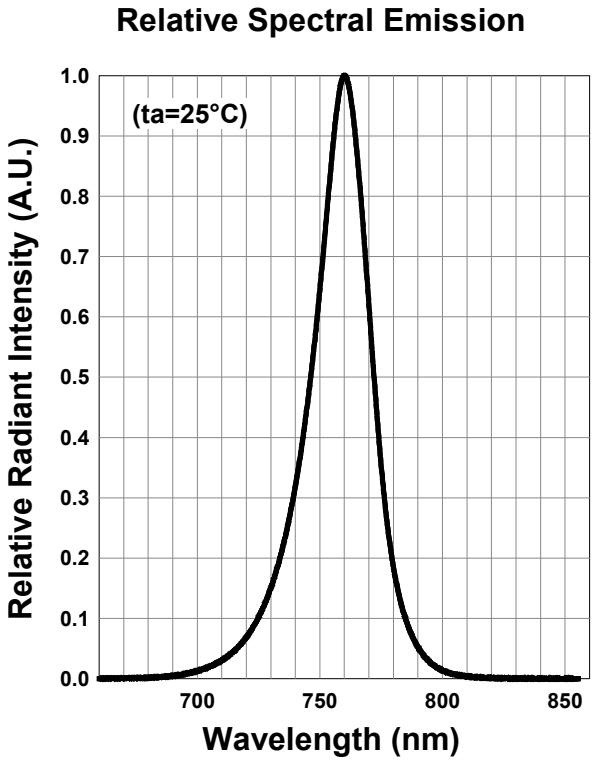
Allowable Forward Current - Ambient Temperature

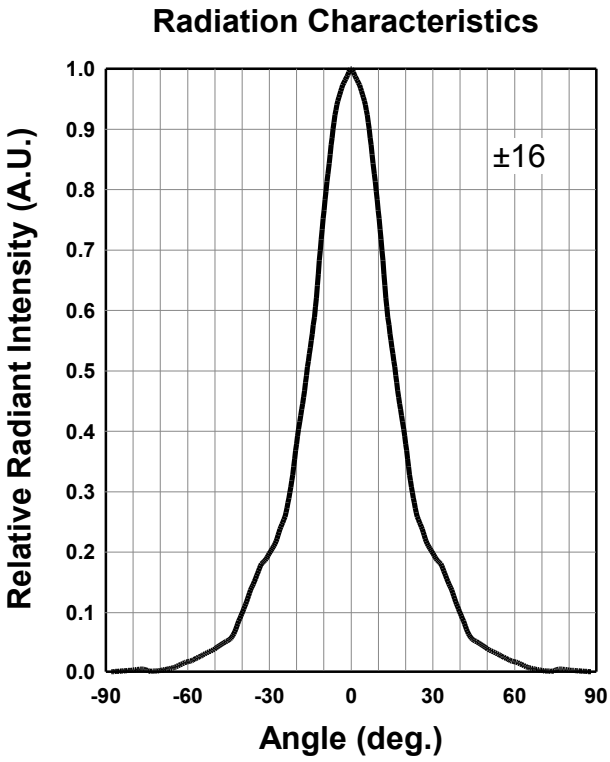


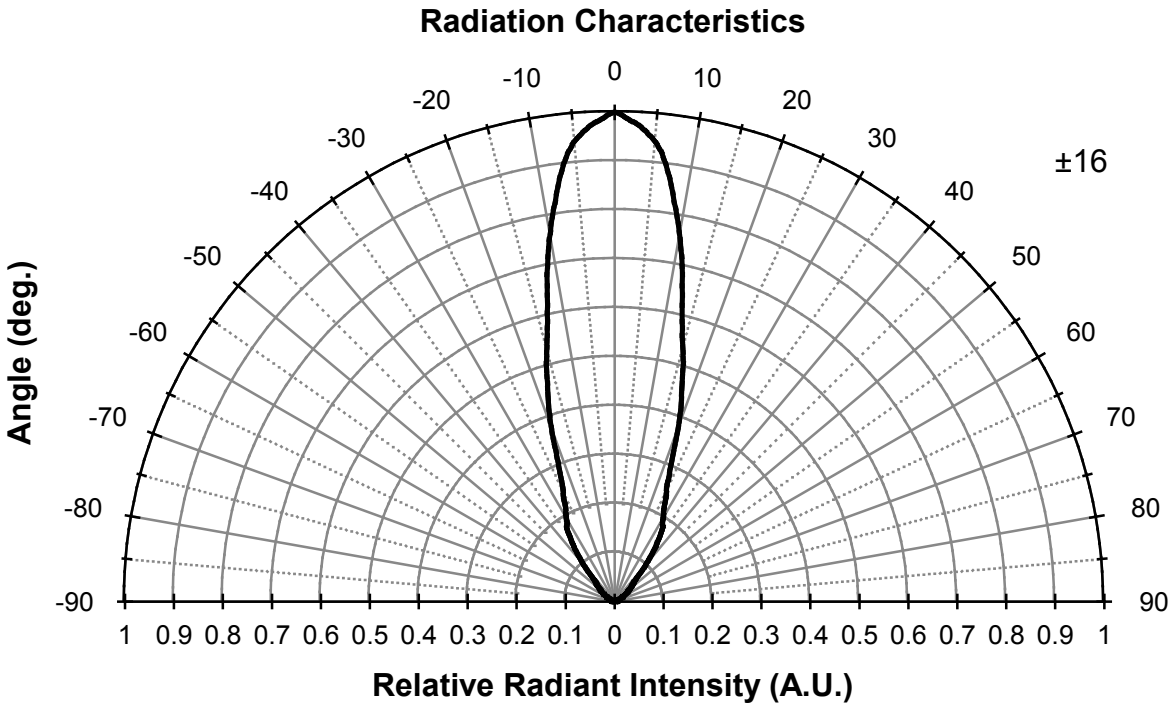

Forward Voltage -
Ambient Temperture
If=50mA
Forward Voltage (V)
2.3
2.2
2.1
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
0
20
40
60
80
100
Ambient Temperatture (°C)


Relative Radiant Intensity -
Ambient Temperature
If=50mA
Relative Radiant Intensity (A.U.)
10
1
0.1
0
20
40
60
80
100
Ambient Temperature (°C)


Peak Wavelength -
Ambient Temperature
If=50mA
Peak Wavelength (nm)
810
800
790
780
770
760
750
740
730
720
710
0
20
40
60
80
100
Ambient Temperature (°C)


Relative Spectral Emission
(ta=25°C)
Relative Radiant Intensity (A.U.)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
700
750
800
850
Wavelength (nm)


Radiation Characteristics
±16
Relative Radiant Intensity (A.U.)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
-90
-60
-30
0
30
60
90
Angle (deg.)


Radiation Characteristics
±16
Angle (deg.)
0
-10
10
-20
20
-30
30
-40
40
-50
50
-60
60
-70
70
-80
80
-90
90
1 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
Relative Radiant Intensity (A.U.)

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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2016.06

The product is manufactured by USHIO Inc. and the spec information is also from USHIO Inc.

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