



Lead (Pb) Free Product – RoHS Compliant

LED395-series UV LED Lamp with UV resistant resin

This series of LED395-xx is an InGaN LED mounted on a lead frame with a clear epoxy lens.

On forward bias, it emits a band of visible light peaks 395nm.

• Specifications

- | | |
|--------------------|----------------------|
| 1) Chip material | InGaN |
| 2) Peak wavelength | 395nm typ. |
| 3) Package | Clear Silicone Resin |
| 4) Solder | Lead free |

• Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	200	mW	T _a =25°C
Forward Current	I _F	50	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Operating Temperature	T _{OPR}	-30 ~ +85	°C	
Storage Temperature	T _{STG}	-40 ~ +100	°C	
Soldering Temperature	T _{SOL}	265	°C	

• Electro-Optical Characteristics [T_a=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =20mA		3.5	4.0	V
Reverse Current	I _R	V _R =5V			10	uA
Radiated Power	P _O	I _F =20mA		11		mW
Peak Wavelength	λ _P	I _F =20mA	390	395	400	nm
Half Width	Δλ	I _F =20mA		15		nm



• **Characteristics of Radiant Intensity [Ta=25°C]**

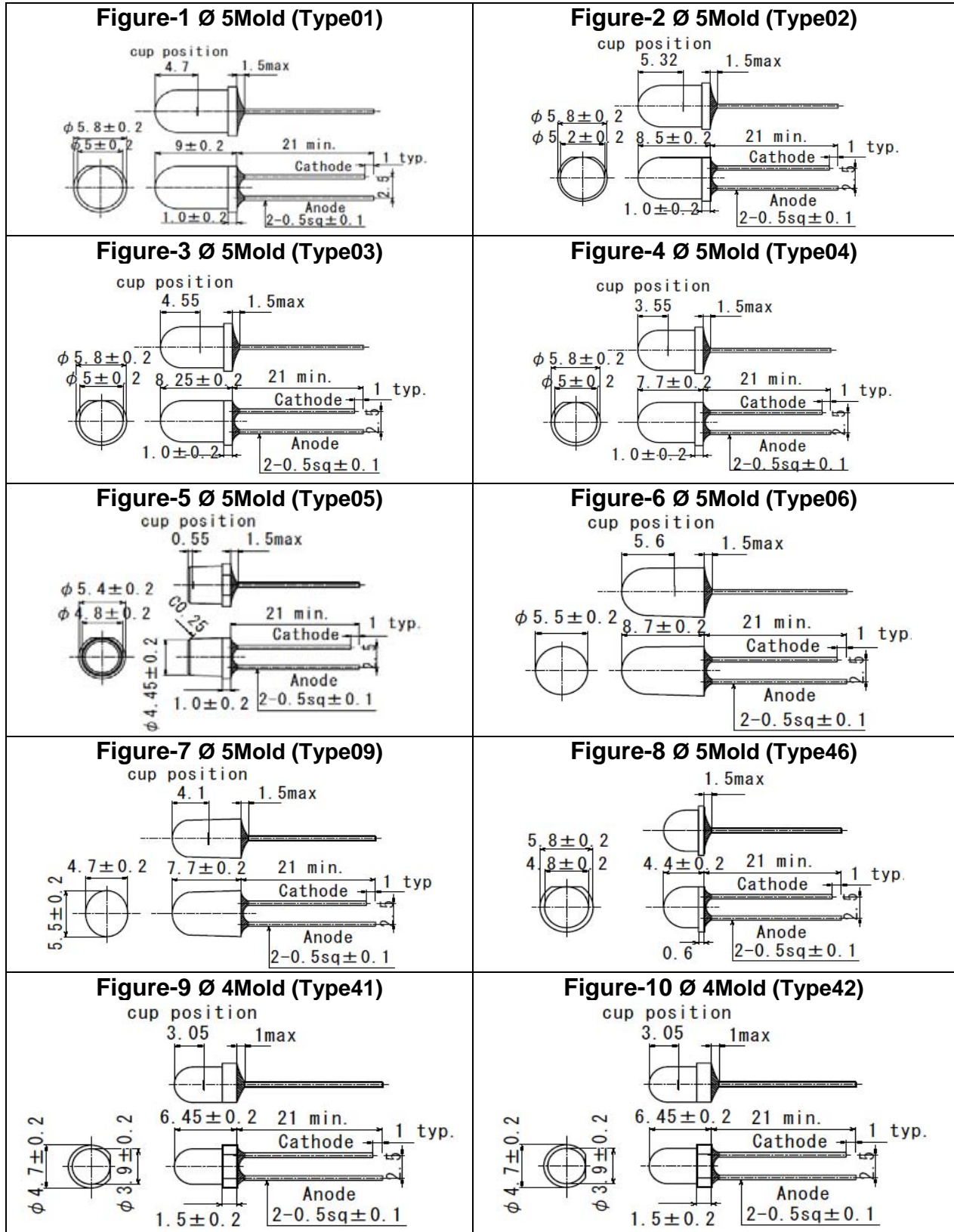
Type	Viewing Half Angle	Radiant Intensity IF= 20mA [mW/sr]			Outer Dimension	Dimension Figure
		Minimum	Typical	Maximum		
LED395-01	± 8°		45		Ø 5	1
LED395-02	± 5°		55		Ø 5	2
LED395-03	± 10°		45		Ø 5	3
LED395-04	± 20°		18		Ø 5	4
LED395-05	± 50°		5		Ø 5	5
LED395-06	± 4°				Ø 5	6
LED395-09	± 25° (Long)				Ø 5	7
	± 10° (Short)				Oval	
LED395-46					Ø 5	8
LED395-41	± 14°				Ø 4	9
LED395-42	± 20°				Ø 4	10
LED395-31					Ø 3	11
LED395-33	± 13°		16		Ø 3	12
LED395-34					Ø 3	13
LED395-36	± 25°		7		Ø 3	14

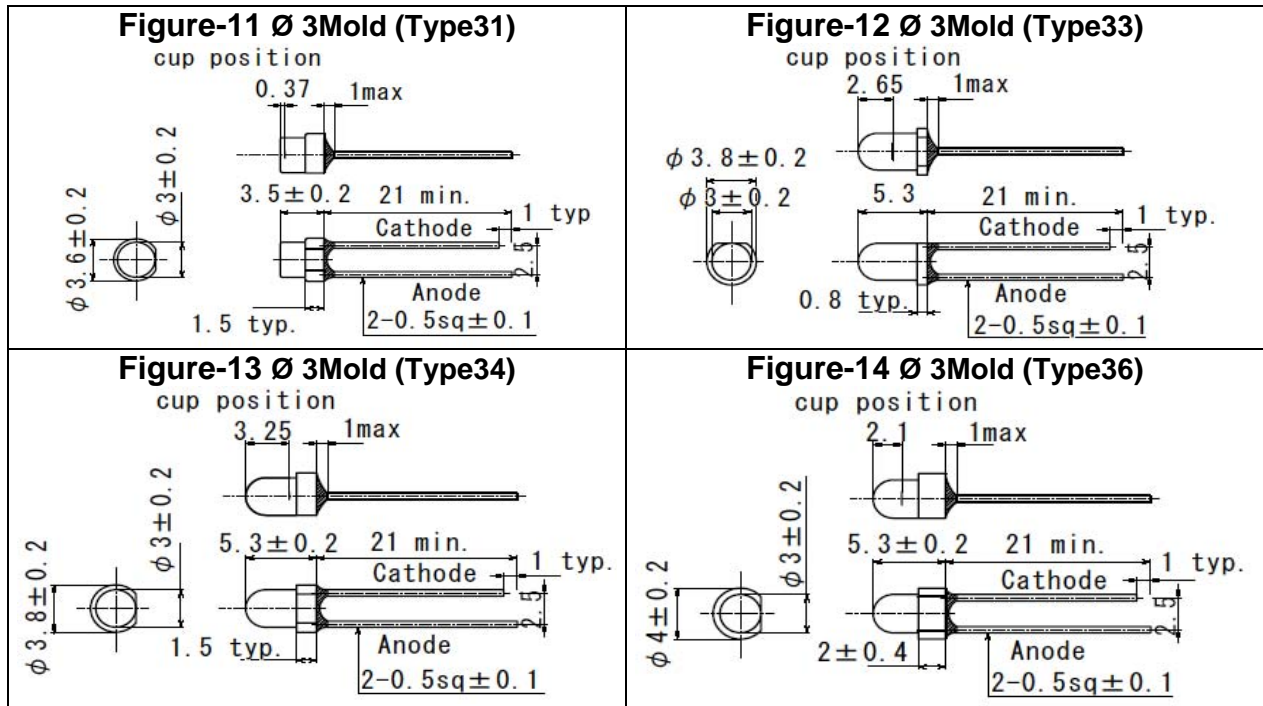
▶ Radiated Power is measured by S3584-08.

▶ Radiation Intensity is measured by Ando Optical Multi Meter AQ2140 & AQ2741.



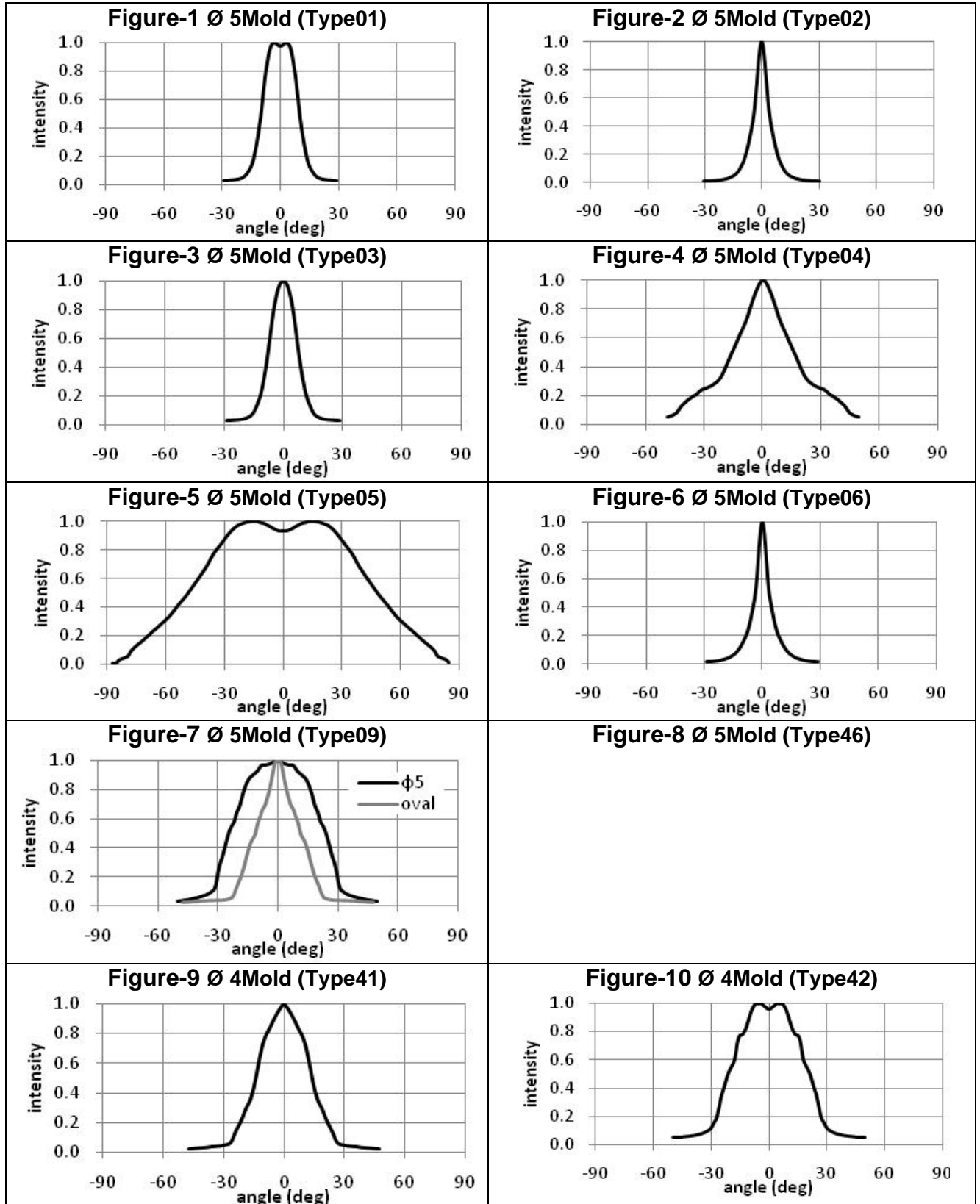
• **Outer Dimension of LED Lamp**



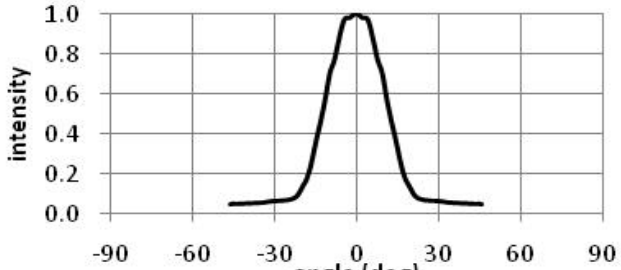
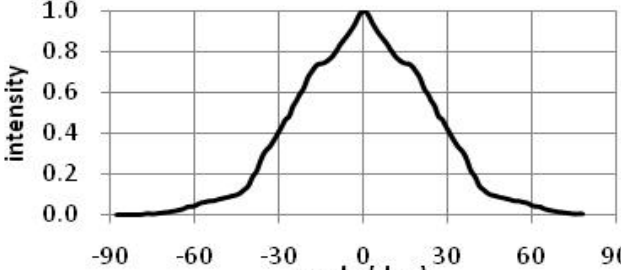




• The Viewing half angle



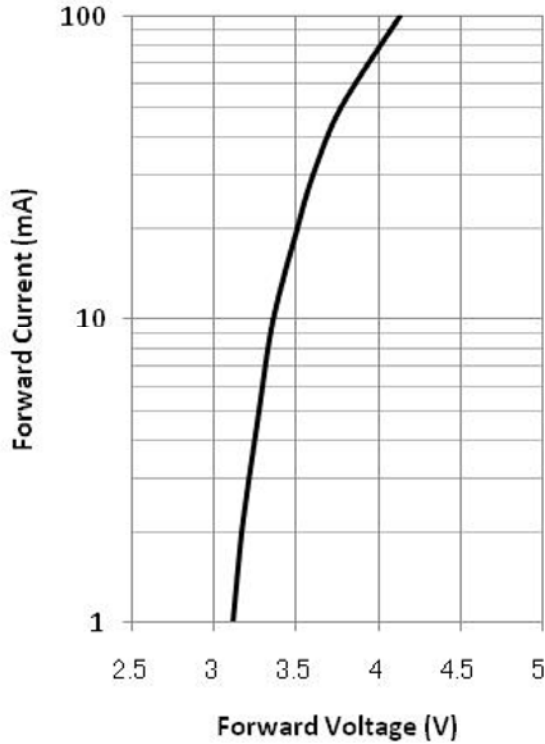


<p>Figure-11 Ø 3Mold (Type31)</p>	<p>Figure-12 Ø 3Mold (Type33)</p>  <table border="1"><caption>Data for Figure-12</caption><thead><tr><th>angle (deg)</th><th>intensity</th></tr></thead><tbody><tr><td>-90</td><td>0.0</td></tr><tr><td>-60</td><td>0.0</td></tr><tr><td>-30</td><td>0.05</td></tr><tr><td>-15</td><td>0.5</td></tr><tr><td>0</td><td>1.0</td></tr><tr><td>15</td><td>0.5</td></tr><tr><td>30</td><td>0.05</td></tr><tr><td>60</td><td>0.0</td></tr><tr><td>90</td><td>0.0</td></tr></tbody></table>	angle (deg)	intensity	-90	0.0	-60	0.0	-30	0.05	-15	0.5	0	1.0	15	0.5	30	0.05	60	0.0	90	0.0
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Forward current-Forward Voltage

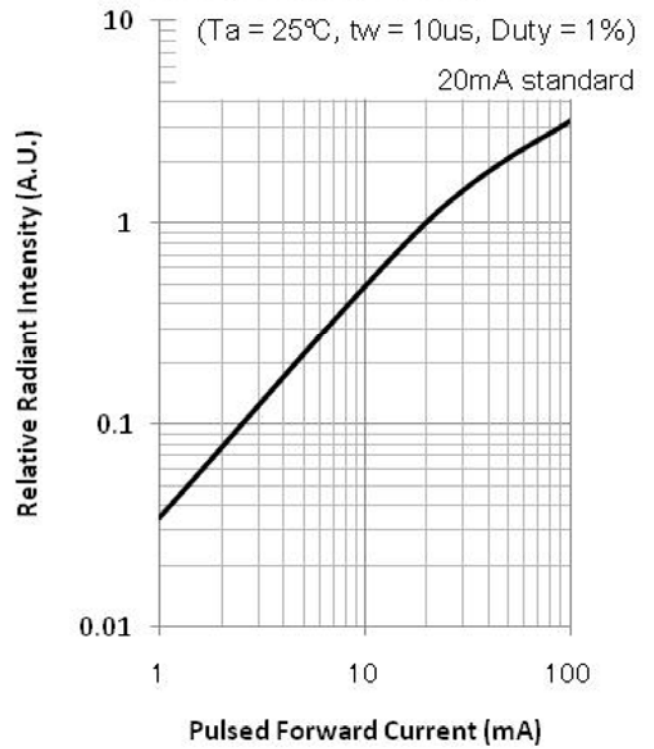
$T_a = 25^\circ\text{C}$, $t_w = 10\mu\text{s}$, Duty = 1%



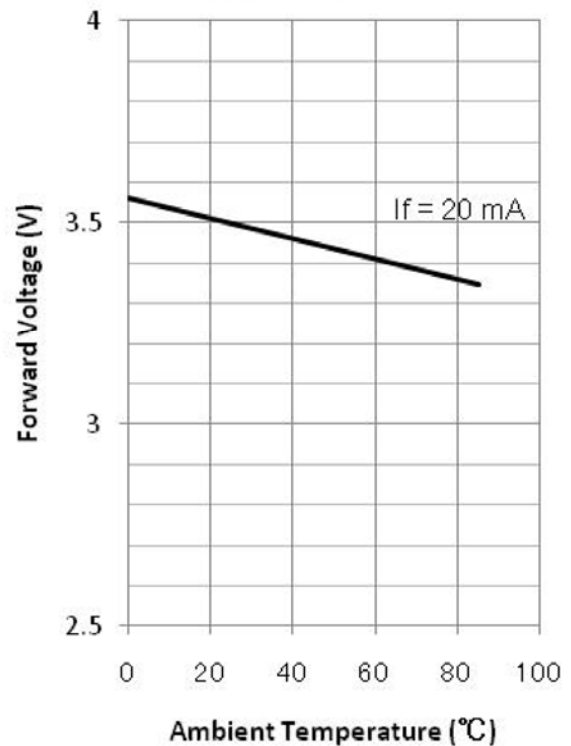
Relative Radiant Intensity - Pulsed Forward Current

($T_a = 25^\circ\text{C}$, $t_w = 10\mu\text{s}$, Duty = 1%)

20mA standard

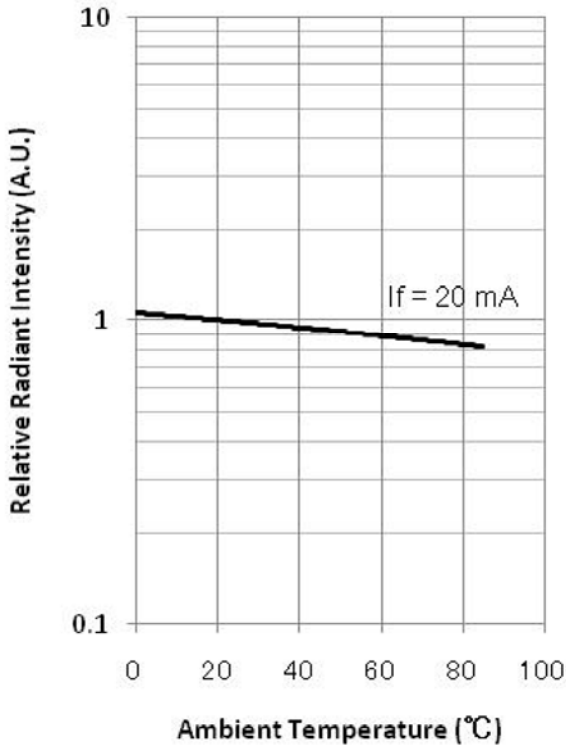


Forward Voltage - Ambient Temperature

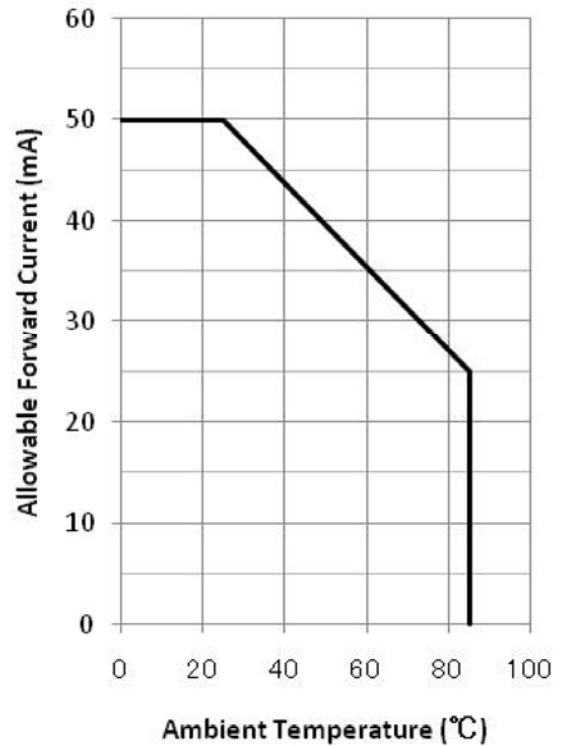




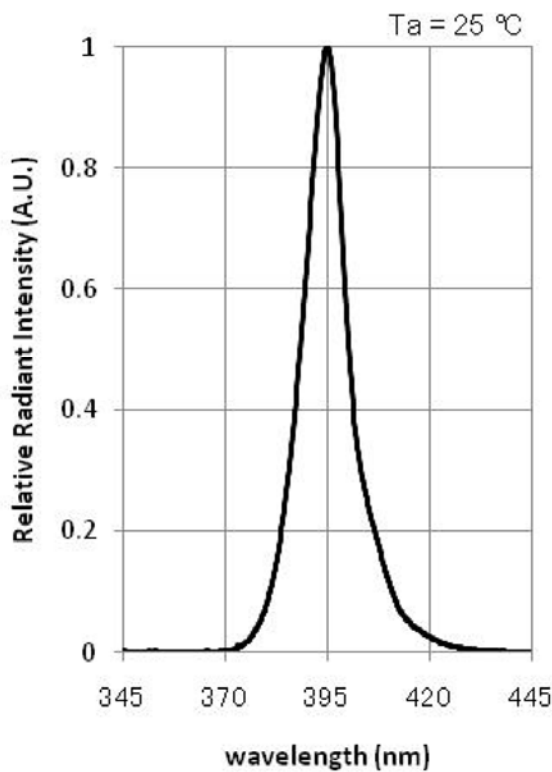
Relative Radiant Intensity - Ambient Temperature



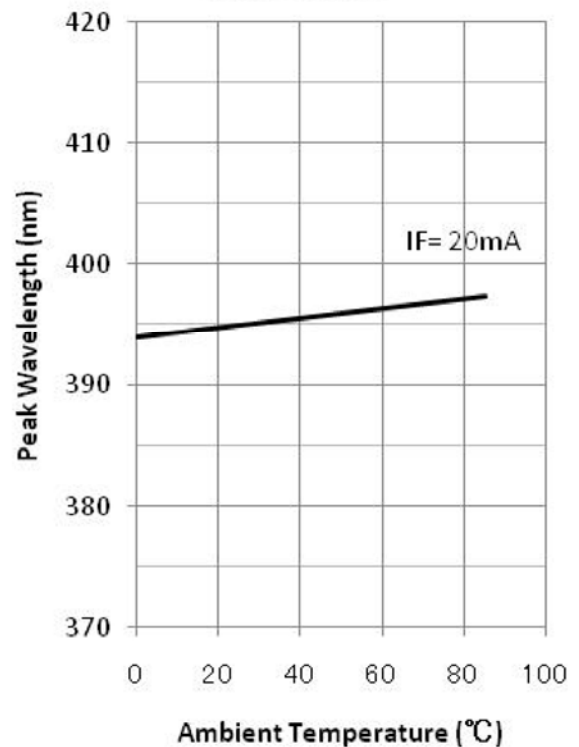
Allowable Forward Current - Ambient Temperature



Peak Wavelength

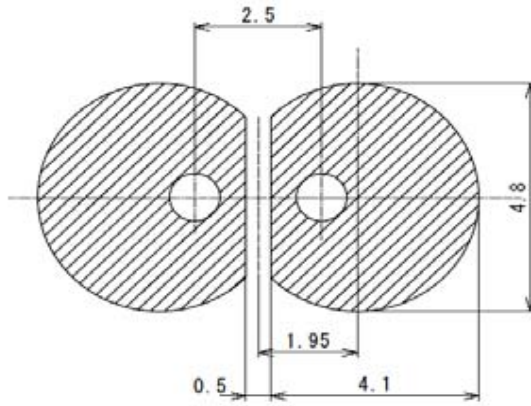


Peak Wavelength - Ambient Temperature





Recommended Land Layout (mm)



Soldering Conditions

