L420R-_ _

UV LED Lamp with UV resistant resin

This series of L420R-_ _ is an InGaN LED mounted on a lead frame with a clear silicone lens. On forward bias, it emits a band of visible light peaks 420nm.

Specifications

1. Chip material InGaN
2. Peak wavelength 420nm typ.
3. Resin Material Clear Silicone Resin
4. Solder Lead free

Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P_D	200	mW	Ta=25°C
Forward Current	I_F	50	mA	Ta=25°C
Reverse Voltage	V_R	5	V	Ta=25°C
Operating Temperature	T_{OPR}	-30 ~ +85	°C	Ta=25°C
Storage Temperature	T_{STG}	-40 ~ +100	°C	
Soldering Temperature	T_{SOL}	265	°C	

Electro-Optical Characteristics (Ta=25°C)

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	IF=20mA		3.4	4.0	V
Reverse Current	I_R	VR=5V			10	uA
Radiated Power	P_O	IF=20mA		15		mW
Peak Wavelength	λ_P	IF=20mA	415	420	425	nm
Half Width	$\Delta\lambda$	IF=20mA		15		nm

Marubeni America Corporation

3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054 408-330-0650 (Ext. 330), 408-330-0655 (Fax), sales@tech-led.com

Characteristics of Radiant Intensity (Ta=25°C)

Type	Viewing Half Angle	Radiant Intensity I_F=20mA Unit : mW/sr			Outer Dimension	Dimension Figure
		Minimum	Typical	Maximum		
L420R-01	±8°		60		Φ 5	1
L420R-02	±5°		60		Φ 5	2
L420R-03	±10°		40		Φ 5	3
L420R-04	±20°		12		Φ 5	4
L420R-05	±50°		4		Φ 5	5
L420R-06	±4°		90		Φ 5	6
L420R-09	±25°Long) ±10°(Short)				Φ 5 Oval	7
L420R-46					Φ 5	8
L420R-41	±14°				Φ 4	9
L420R-42	±20°				Φ 4	10
L420R-31					Φ 3	11
L420R-33	±13°		18		Φ 3	12
L420R-34					Φ 3	13
L420R-36	±25°		9		Φ 3	14

Radiated Power is measured by S3584-08.
Radiant Intensity is measured by Ando Optical Multi Meter AQ2140 & AQ2741.

Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054 408-330-0650 (Ext. 330), 408-330-0655 (Fax), **sales@tech-led.com**

Outer Dimension of LED Lamp

Figure-1 Φ5Mold (Type01)

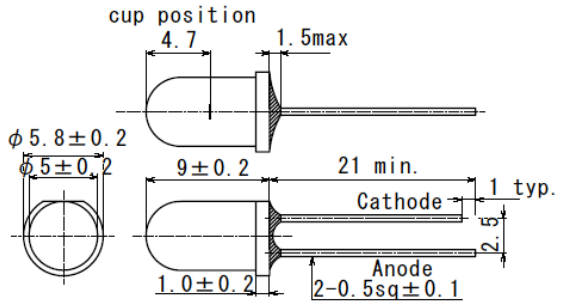


Figure-2 Φ5Mold (Type02)

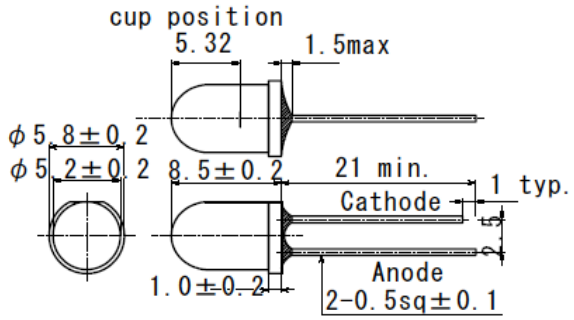


Figure-3 Φ5Mold (Type03)

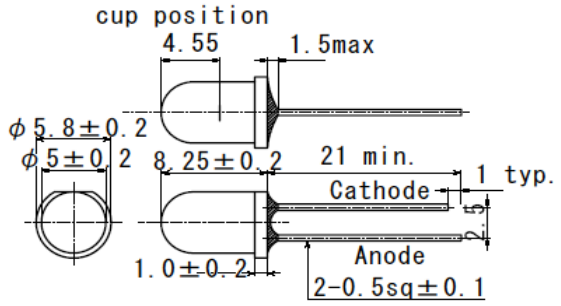


Figure-4 Φ5Mold (Type04)

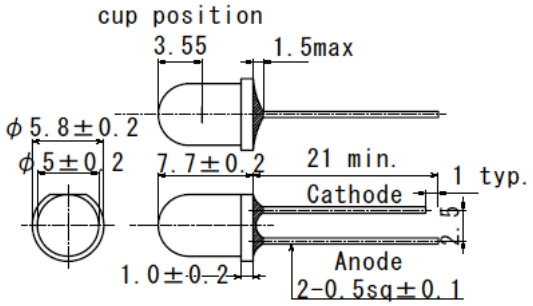


Figure-5 Φ5Mold (Type05)

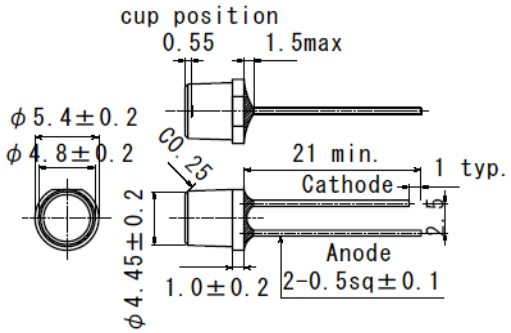


Figure-6 Φ5Mold (Type06)

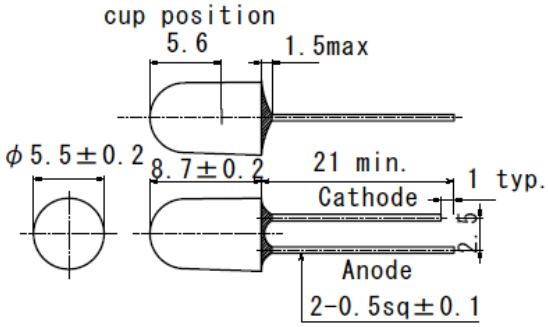


Figure-7 Φ5Mold (Type09)

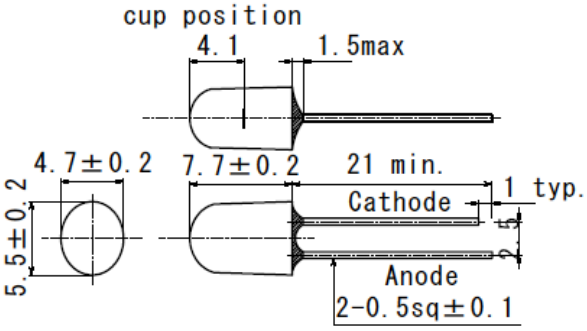


Figure-8 Φ5Mold (Type46)

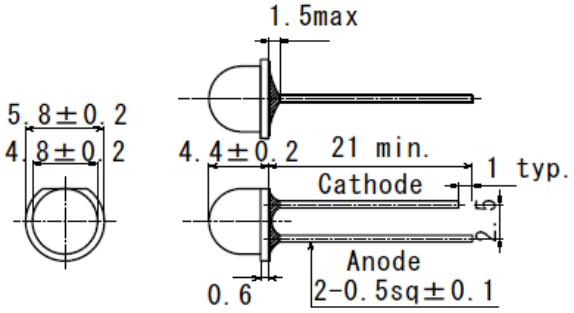


Figure-9 Φ4Mold (Type41)

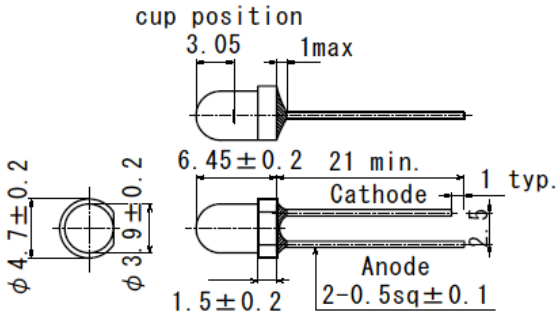
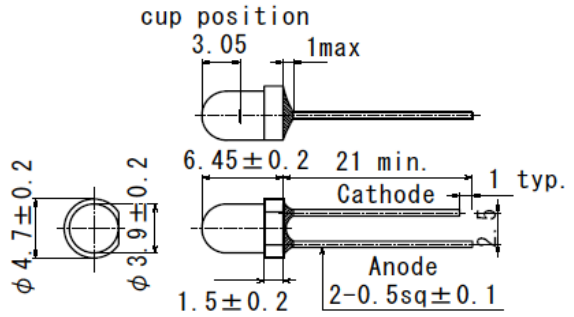


Figure-10 Φ4Mold (Type42)



Marubeni America Corporation

3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054 408-330-0650 (Ext. 330), 408-330-0655 (Fax), sales@tech-led.com

Outer Dimension of LED Lamp

Figure-11 Φ3Mold (Type31)

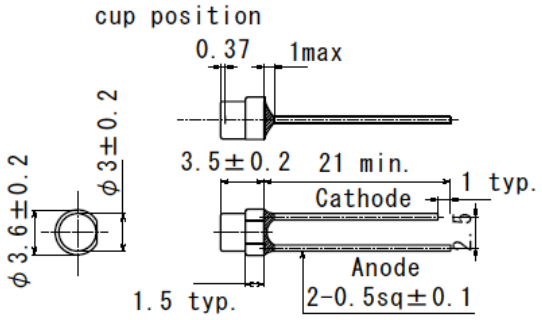


Figure-12 Φ3Mold (Type33)

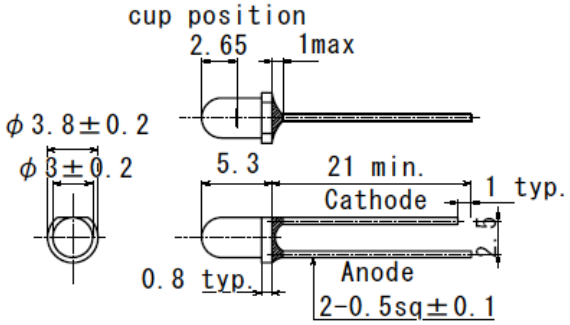


Figure-13 Φ3Mold (Type34)

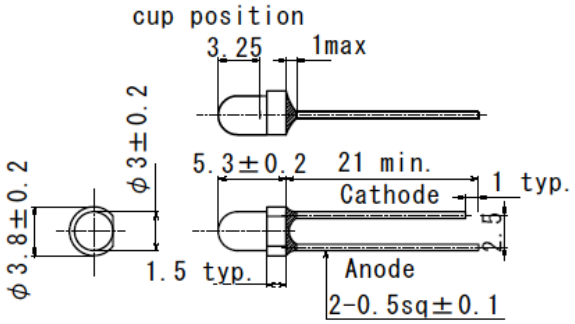


Figure-14 Φ3Mold (Type36)

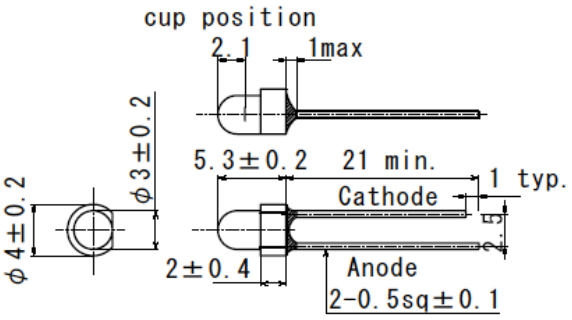


Figure-15

Figure-16

Figure-17

Figure-18

Figure-19

Figure-20

Marubeni America Corporation

3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054 408-330-0650 (Ext. 330), 408-330-0655 (Fax), sales@tech-led.com

The Viewing half angle

Figure-1 Φ5Mold (Type01)

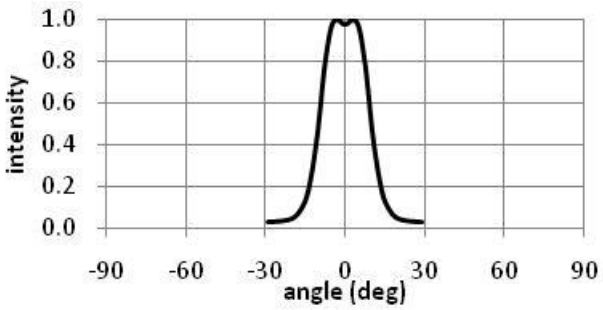


Figure-2 Φ5Mold (Type02)

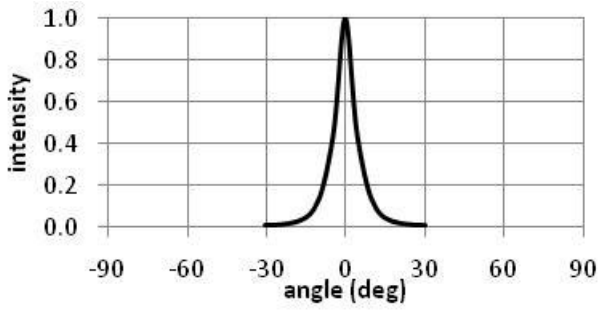


Figure-3 Φ5Mold (Type03)

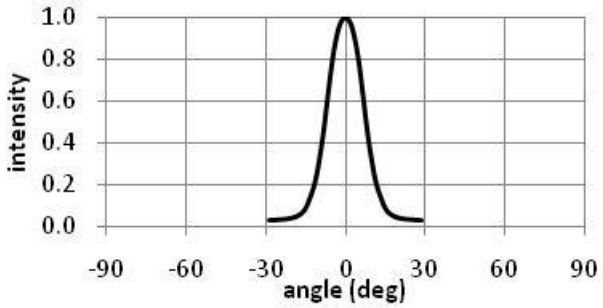


Figure-4 Φ5Mold (Type04)

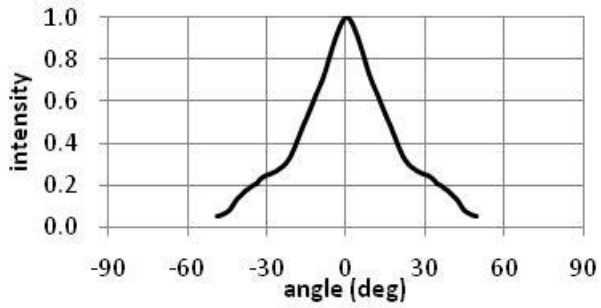


Figure-5 Φ5Mold (Type05)

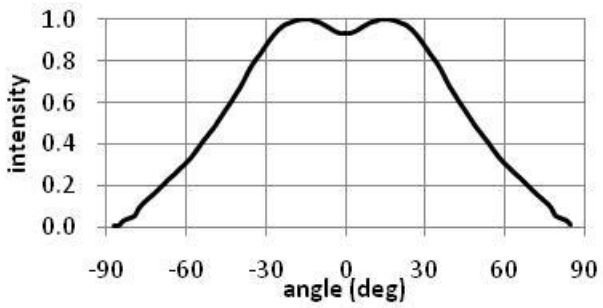


Figure-6 Φ5Mold (Type06)

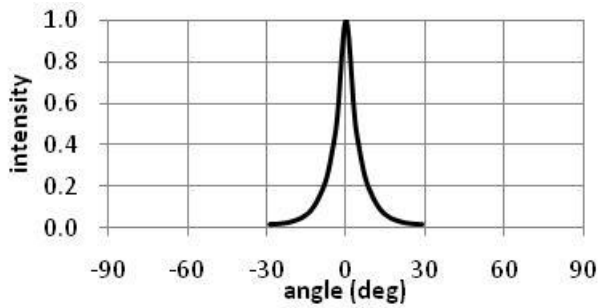


Figure-7 Φ5Mold (Type09)

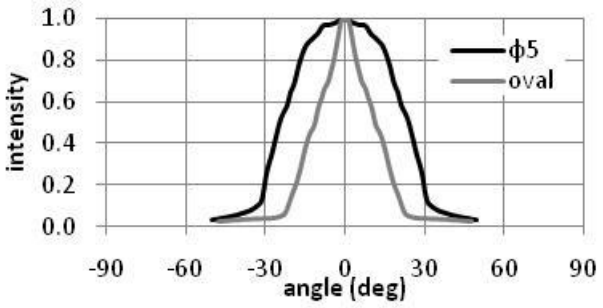


Figure-8 Φ5Mold (Type46)

Figure-9 Φ4Mold (Type41)

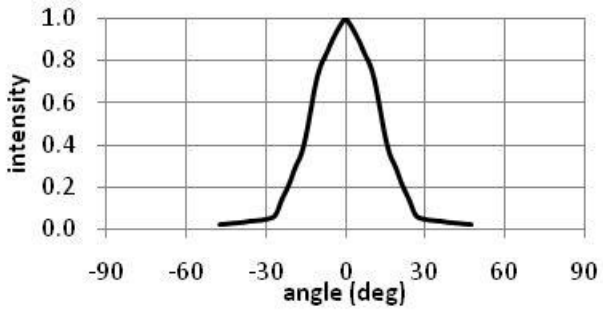
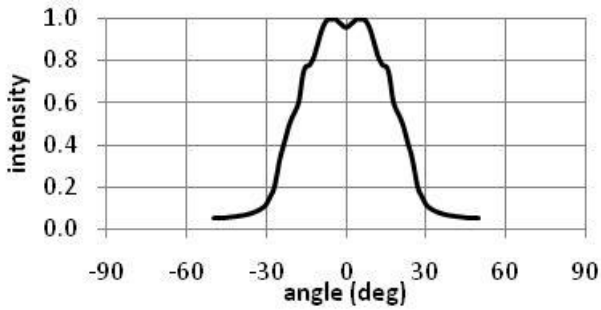
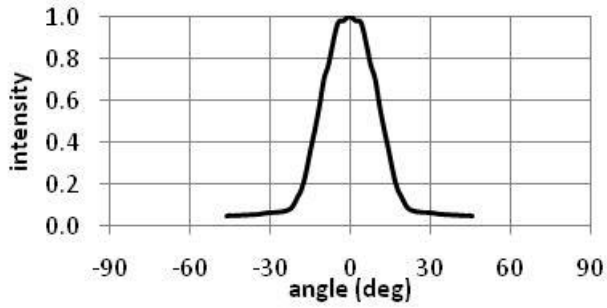
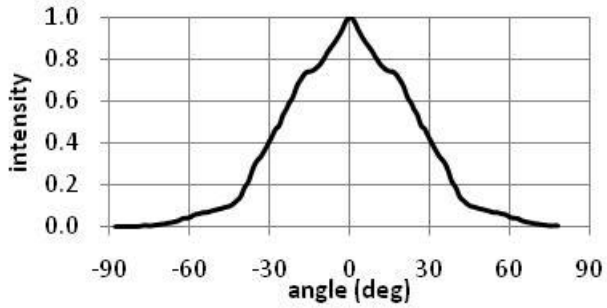


Figure-10 Φ4Mold (Type42)

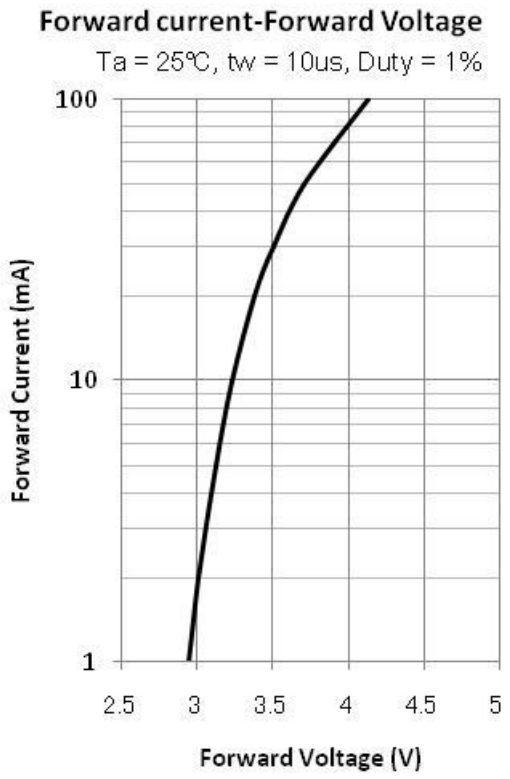


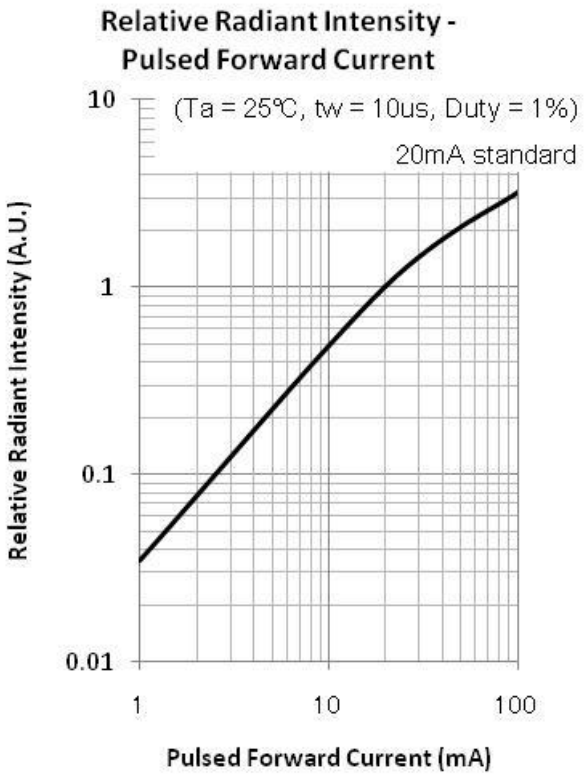
Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054 408-330-0650 (Ext. 330), 408-330-0655 (Fax), sales@tech-led.com

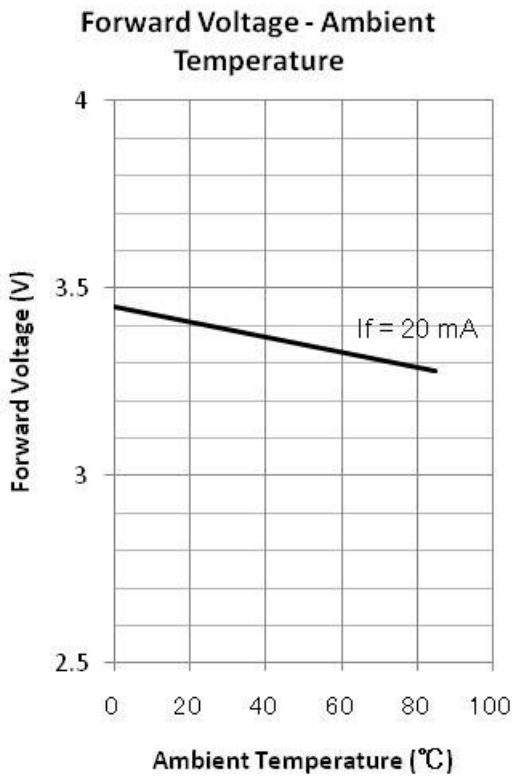
The Viewing half angle

Figure-11 Φ3Mold (Type31)	**Figure-12 Φ3Mold (Type33)** 
Figure-13 Φ3Mold (Type34)	**Figure-14 Φ3Mold (Type36)** 
Figure-15	**Figure-16**
Figure-17	**Figure-18**
Figure-19	**Figure-20**

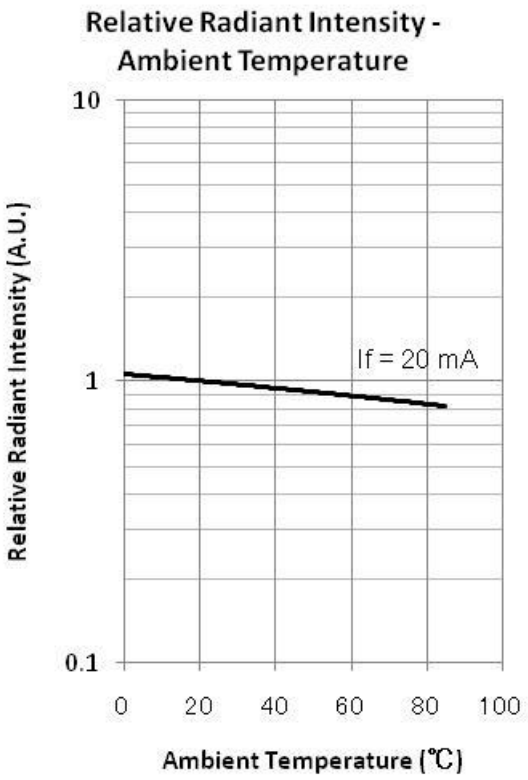
Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054 408-330-0650 (Ext. 330), 408-330-0655 (Fax), sales@tech-led.com

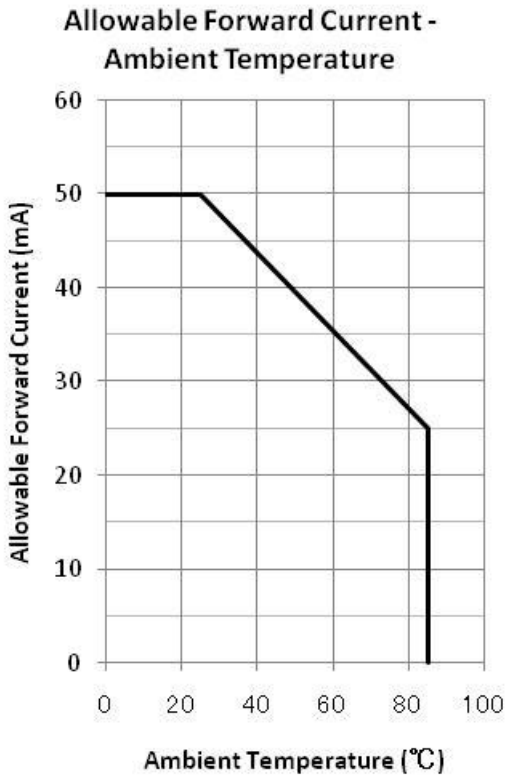


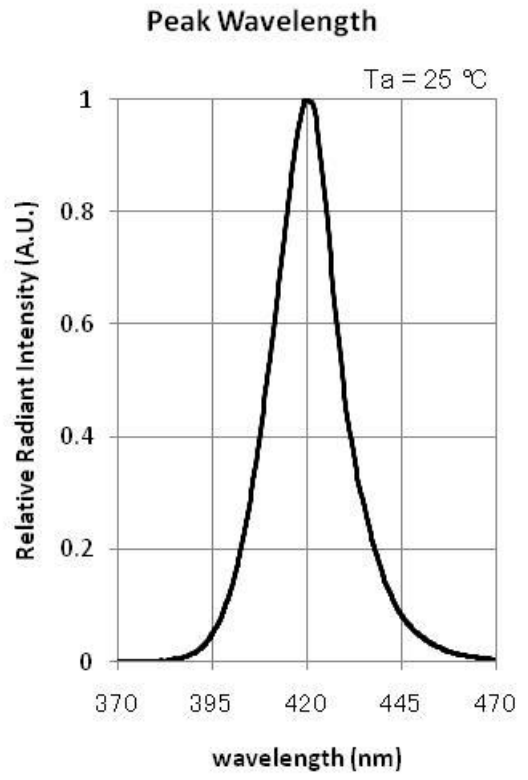


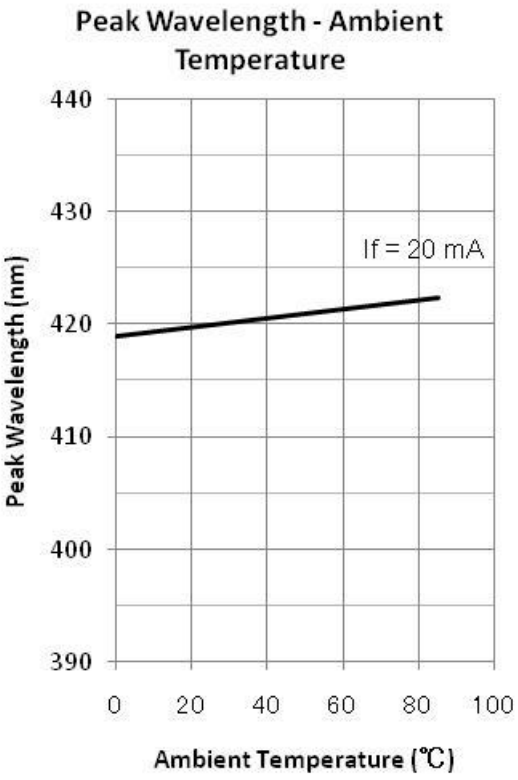


Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054 408-330-0650 (Ext. 330), 408-330-0655 (Fax), sales@tech-led.com



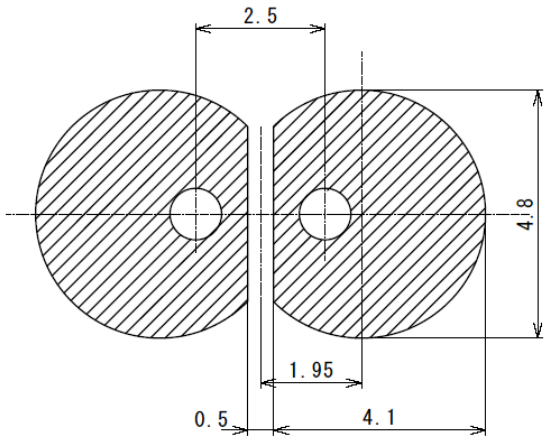




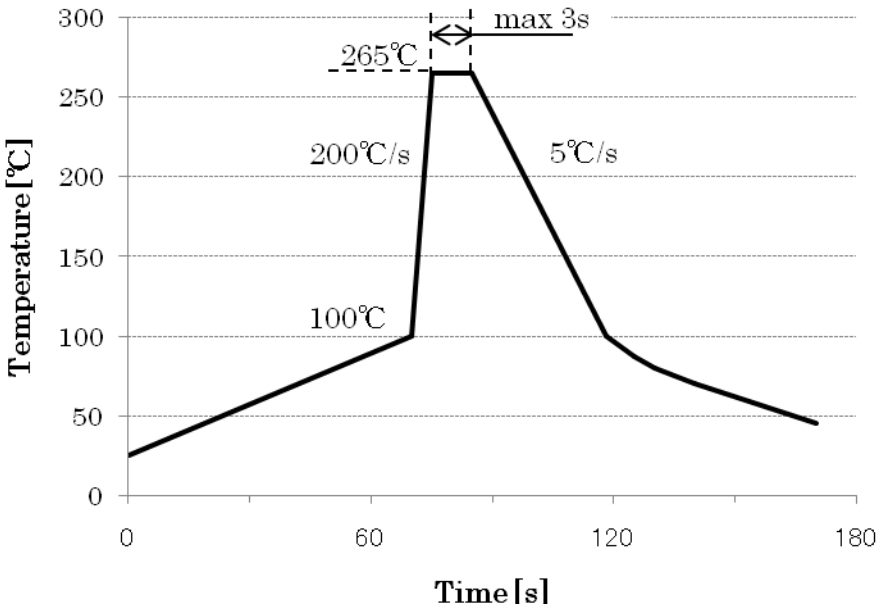


Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054 408-330-0650 (Ext. 330), 408-330-0655 (Fax), **sales@tech-led.com**

Recommended Land Layout (unit: mm)



Soldering Conditions



Marubeni America Corporation
3945 Freedom Circle, Suite 1000, Santa Clara, CA 95054 408-330-0650 (Ext. 330), 408-330-0655 (Fax), **sales@tech-led.com**