ROITHNER LASERTECHNIK
Wiedner Hauptstraße 76, A-1040 Vienna, Austria
Tel.: ++43 1 586 52 43-0, Fax -44, office@roithner-laser.com

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	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	
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	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	$\Delta\lambda$	I_F=20mA		15		nm

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● ***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) ± 10° (Short)				Ø 5 Oval	7
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 measures by Ando Optical Multi Meter AQ2140 & AQ2741.

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● ***Outer Diemnsion of LED Lamp***

Figure-1 Ø 5Mold (Type01)

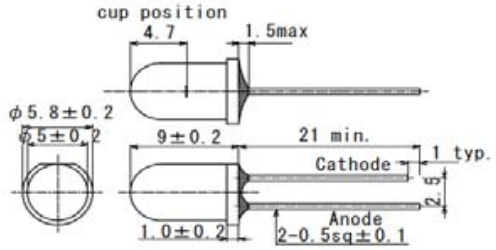


Figure-2 Ø 5Mold (Type02)

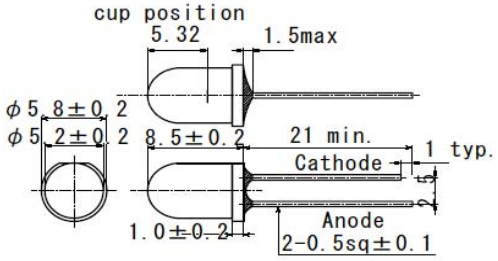


Figure-3 Ø 5Mold (Type03)

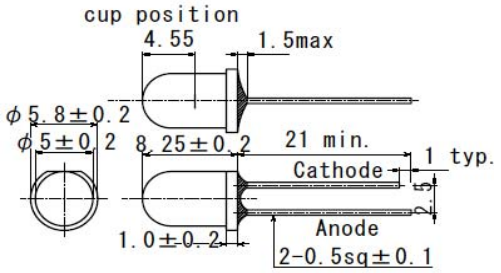


Figure-4 Ø 5Mold (Type04)

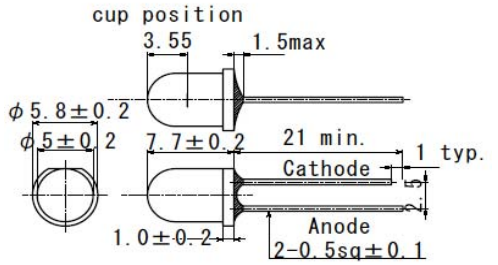


Figure-5 Ø 5Mold (Type05)

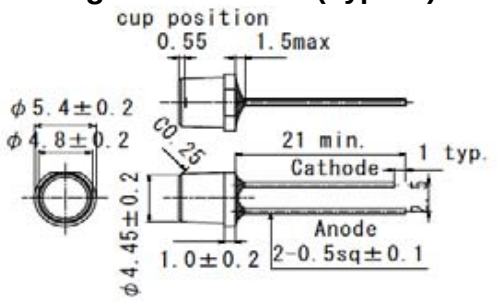


Figure-6 Ø 5Mold (Type06)

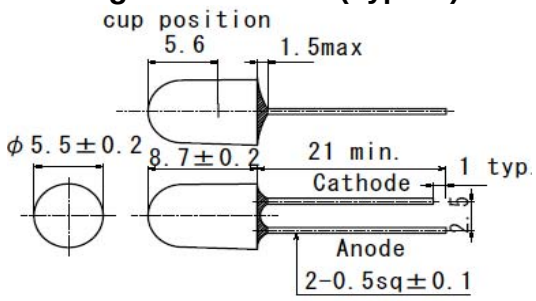


Figure-7 Ø 5Mold (Type09)

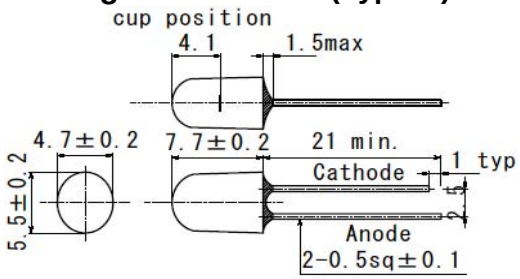


Figure-8 Ø 5Mold (Type46)

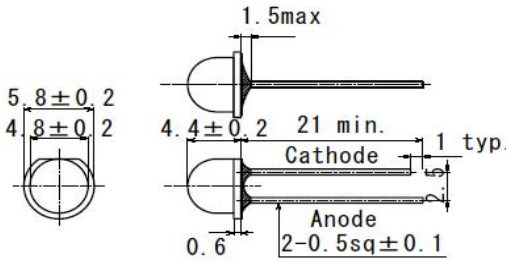


Figure-9 Ø 4Mold (Type41)

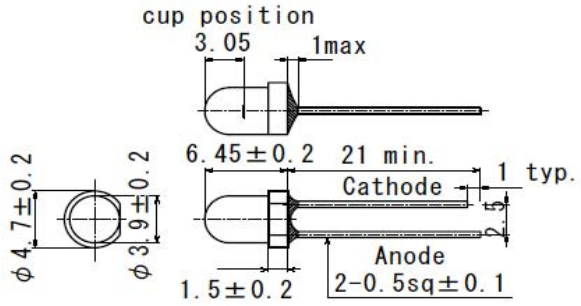
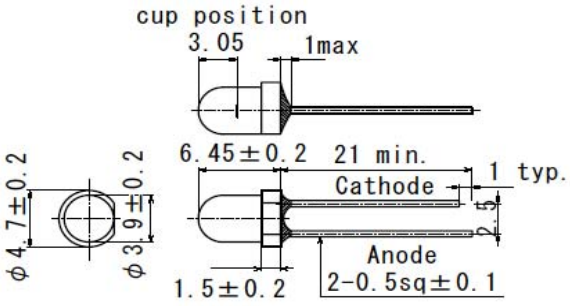


Figure-10 Ø 4Mold (Type42)



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Figure-11 Ø 3Mold (Type31)

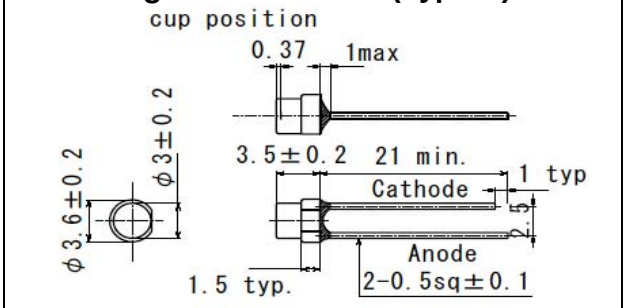


Figure-12 Ø 3Mold (Type33)

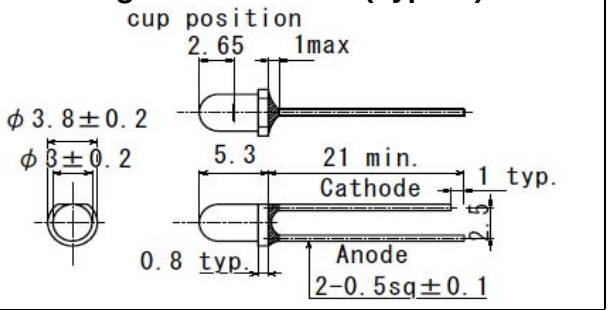


Figure-13 Ø 3Mold (Type34)

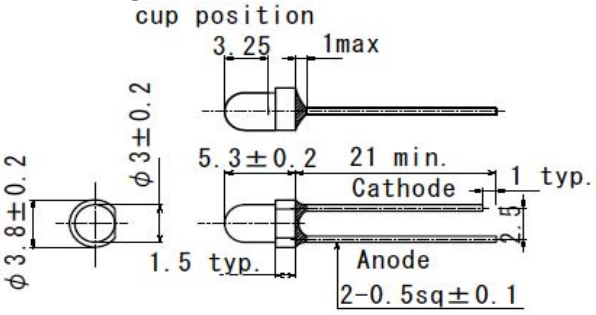
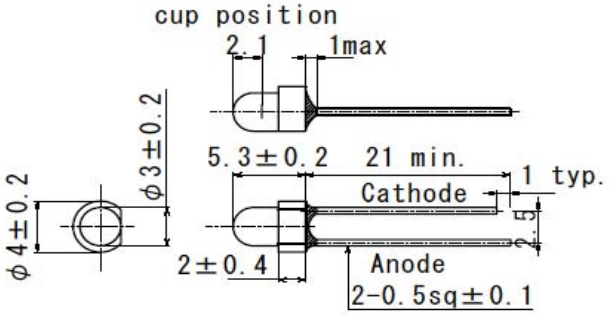


Figure-14 Ø 3Mold (Type36)



- ***The Viewing half angle***

Figure-1 Ø 5Mold (Type01)

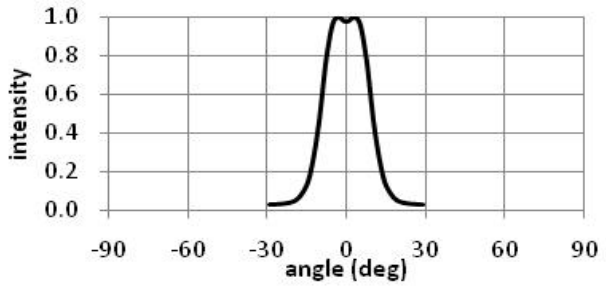


Figure-2 Ø 5Mold (Type02)

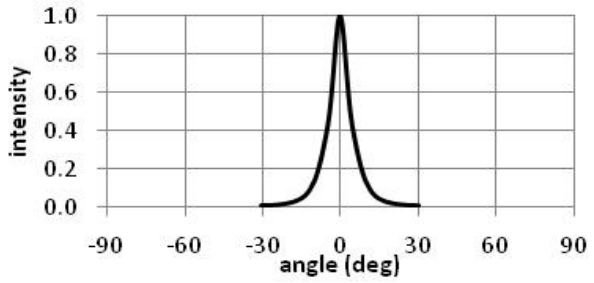


Figure-3 Ø 5Mold (Type03)

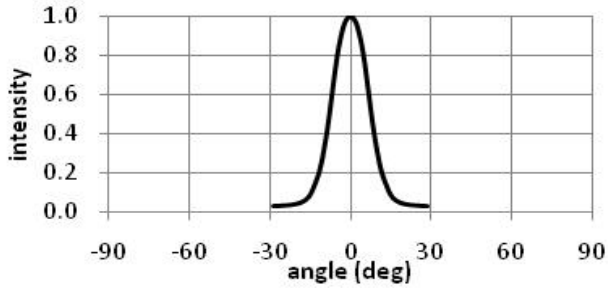


Figure-4 Ø 5Mold (Type04)

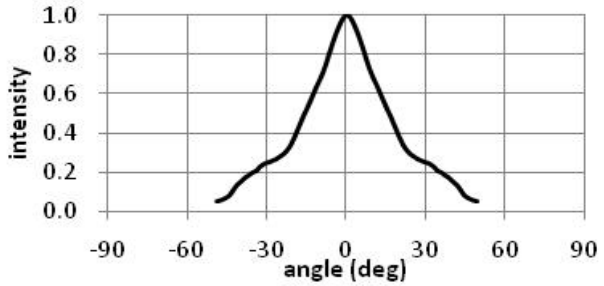


Figure-5 Ø 5Mold (Type05)

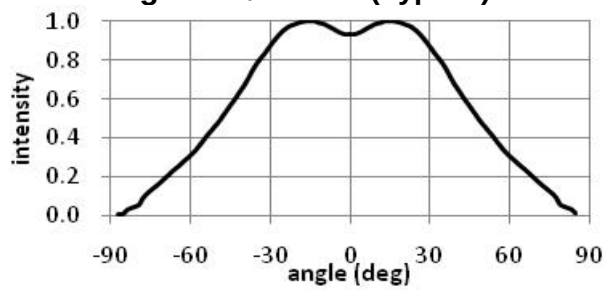


Figure-6 Ø 5Mold (Type06)

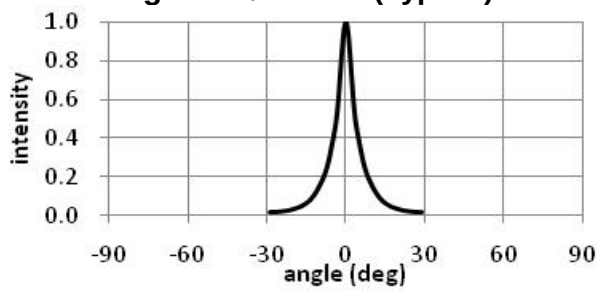


Figure-7 Ø 5Mold (Type09)

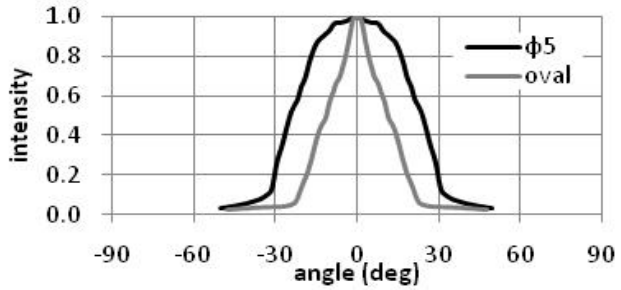


Figure-8 Ø 5Mold (Type46)

Figure-9 Ø 4Mold (Type41)

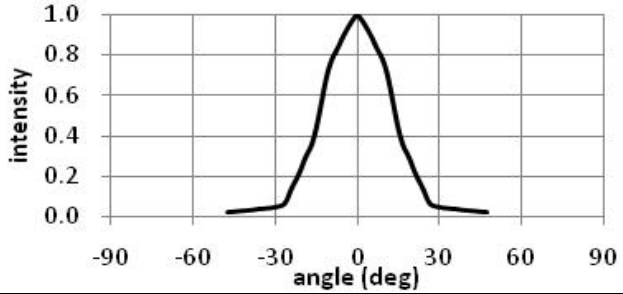
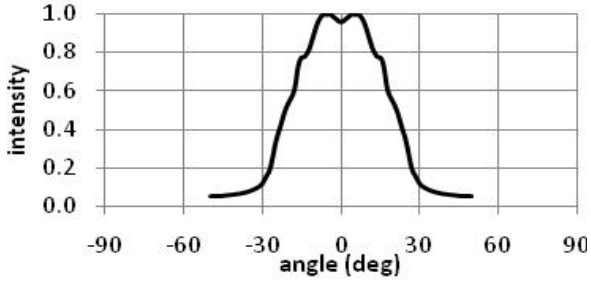
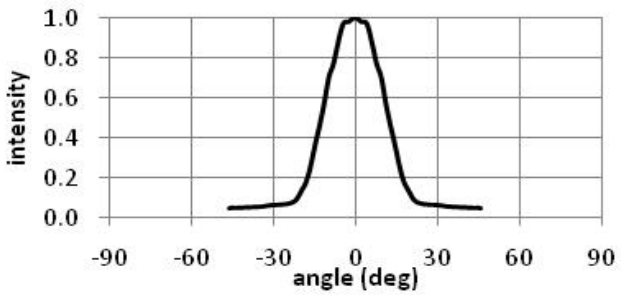
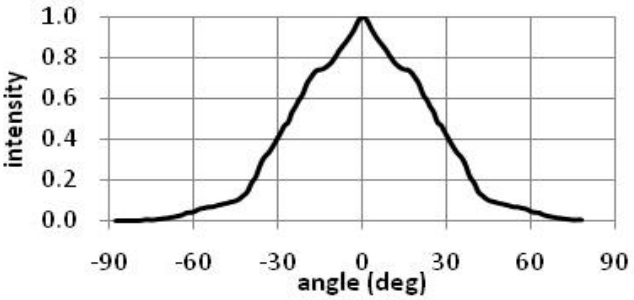
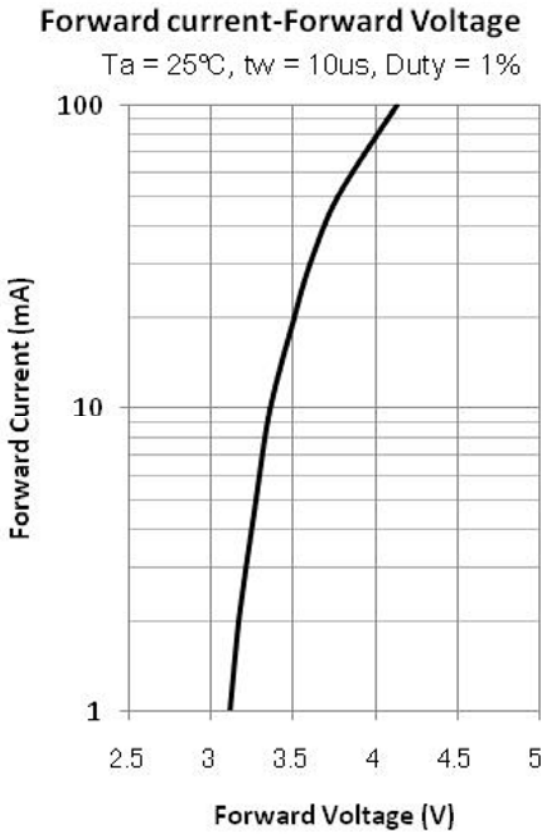


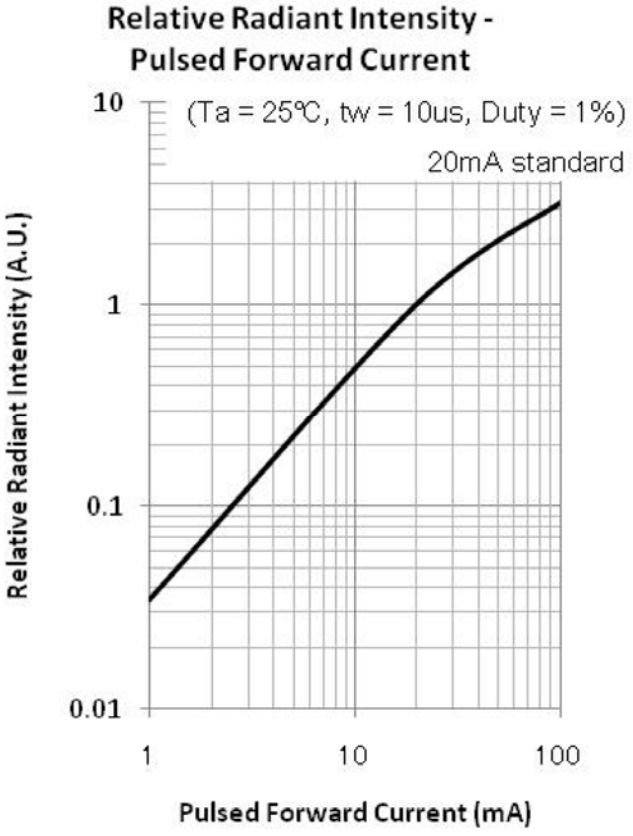
Figure-10 Ø 4Mold (Type42)

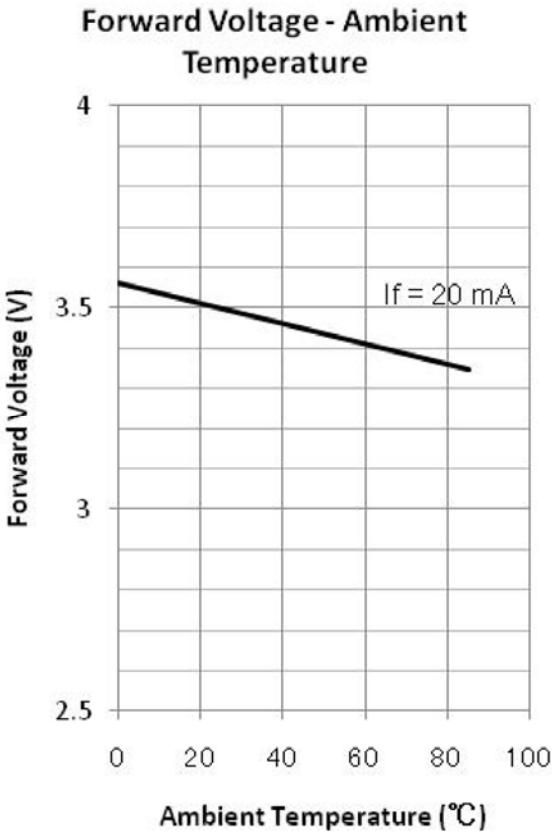


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Figure-11 Ø 3Mold (Type31)	**Figure-12 Ø 3Mold (Type33)** 
Figure-13 Ø 3Mold (Type34)	**Figure-14 Ø 3Mold (Type36)** 

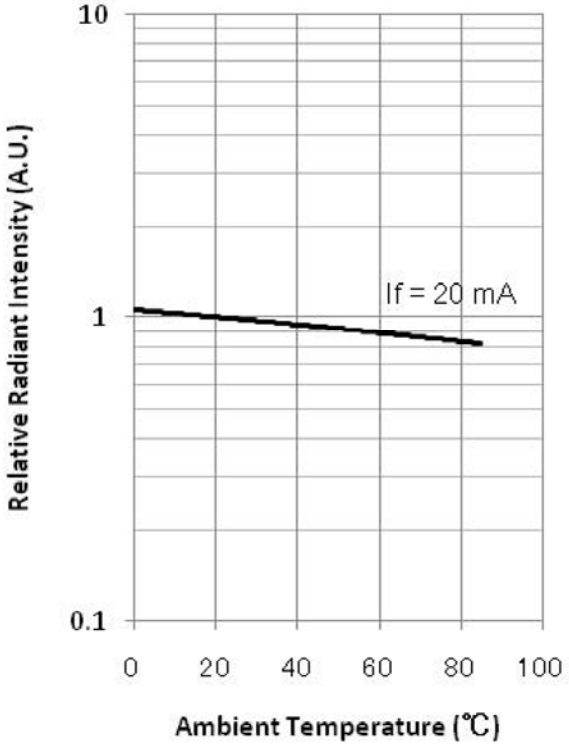

Forward current-Forward Voltage
Ta = 25℃, tw = 10us, Duty = 1%
Forward Current (mA)
100
10
1
2.5
3
3.5
4
4.5
5
Forward Voltage (V)


Relative Radiant Intensity - Pulsed Forward Current
(Ta = 25℃, tw = 10us, Duty = 1%)
20mA standard
Relative Radiant Intensity (A.U.)
10
1
0.1
0.01
1
10
100
Pulsed Forward Current (mA)

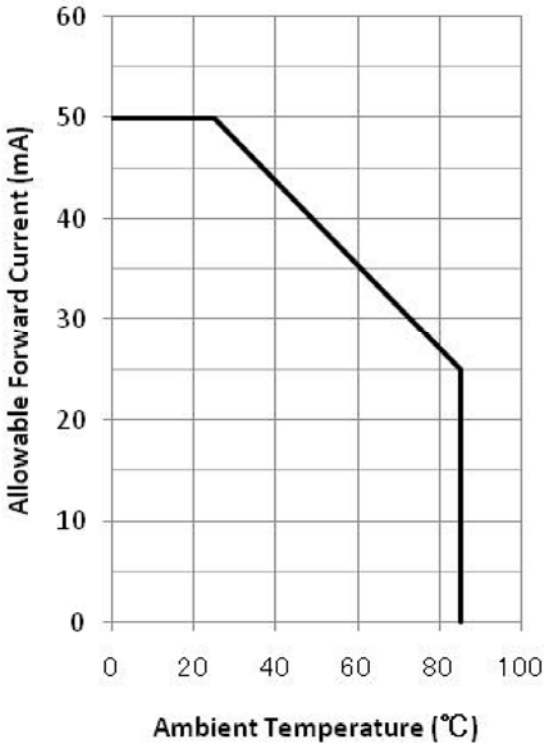

Forward Voltage - Ambient Temperature
If = 20 mA
Forward Voltage (V)
4
3.5
3
2.5
0
20
40
60
80
100
Ambient Temperature (℃)

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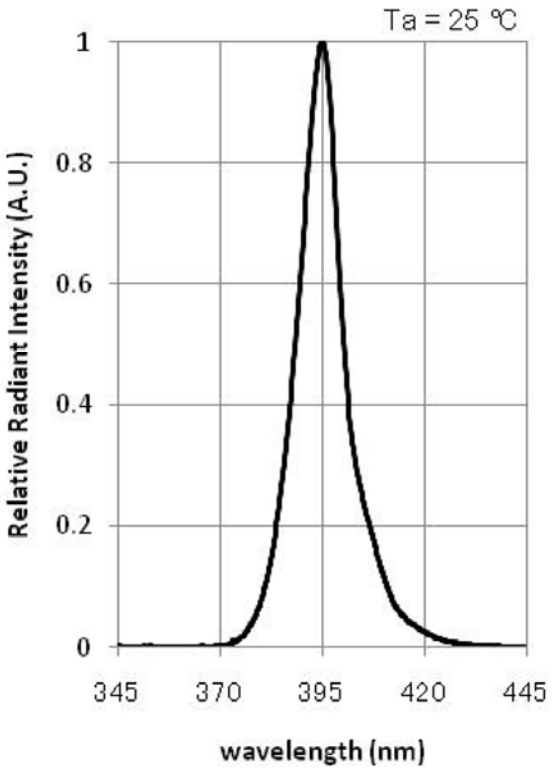
Relative Radiant Intensity - Ambient Temperature



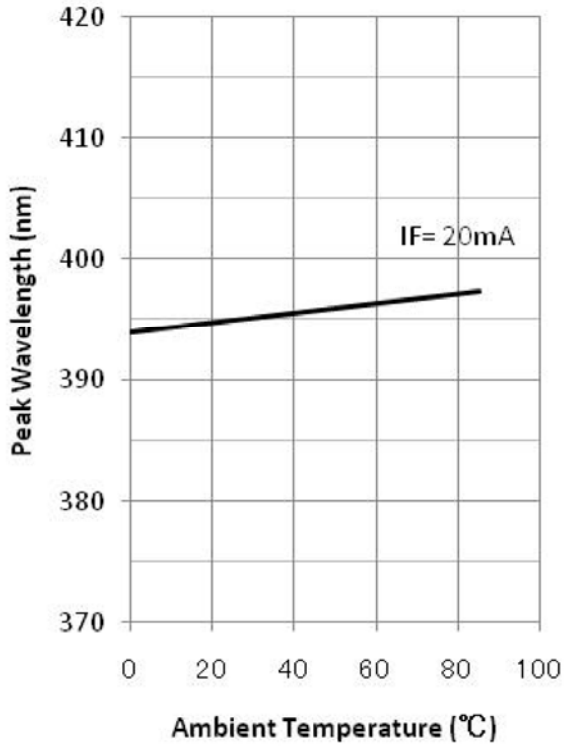
Allowable Forward Current - Ambient Temperature



Peak Wavelength



Peak Wavelength - Ambient Temperature



Recommended Land Layout (mm)

