

Peak Emission Wavelength: 1650nm



### Description

- Size 1206: 3.2 (L) x 1.6 (W) x 1.2 (H) mm
- Circuit substrate: glass laminated epoxy
- Devices are RoHS conform
- Lead free solderable, soldering pads: gold plated
- Taped in 8 mm blister tape, cathode to transporting perforation
- All devices are sorted into radiant intensity classes
- High radiation intensity types

### Absolute Maximum Ratings (Ta=25°C)



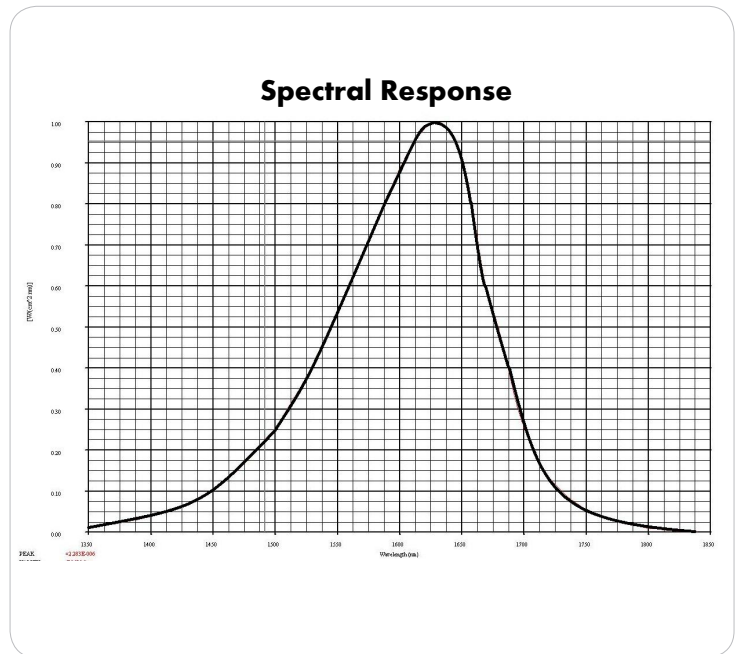
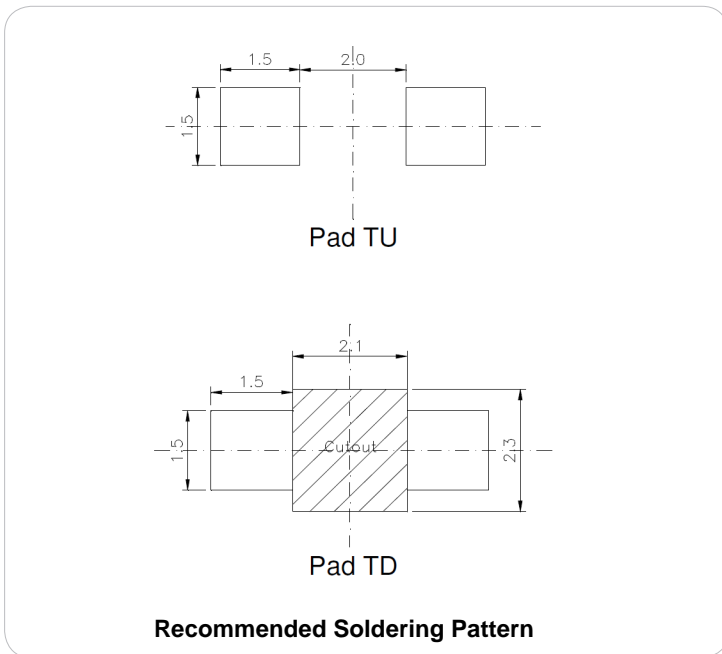
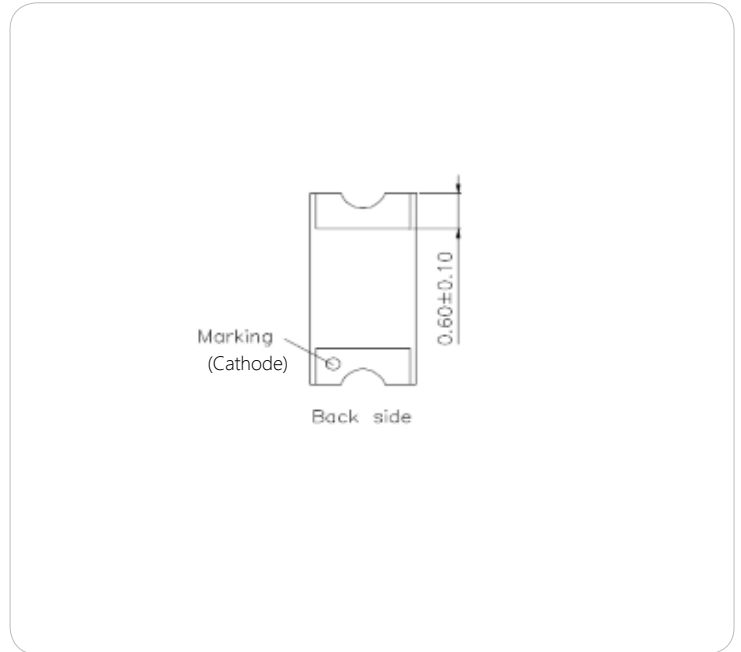
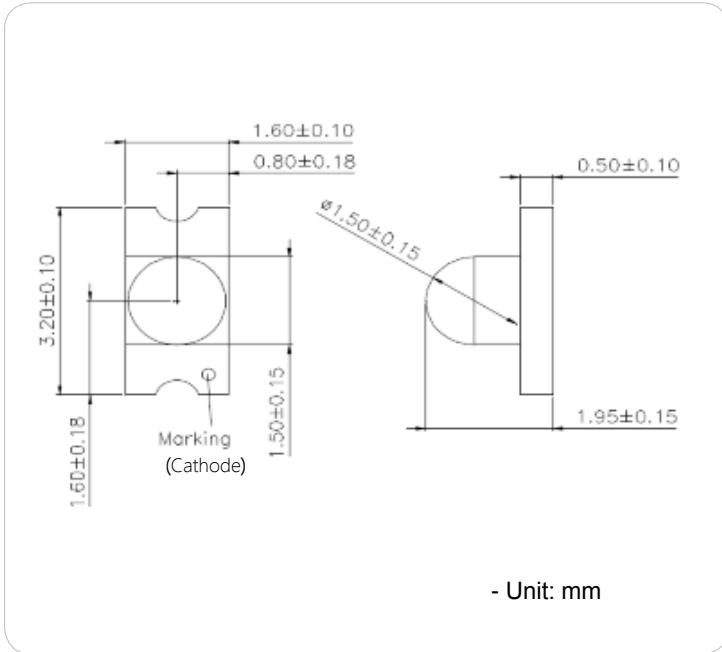
ITEMS	SYMBOL	RATINGS	UNIT
Forward DC Current	If	50	mA
Peak Forward Current *	Ifp	100	mA
Reverse Voltage	Vr	5	V
Reverse Current	Ir	100	uA
Operating Temperature	Top	-40 to +85	°C
Storage Temperature	Tst	-55 to +85	°C
Thermal Resistance	RthJA	450	K/W

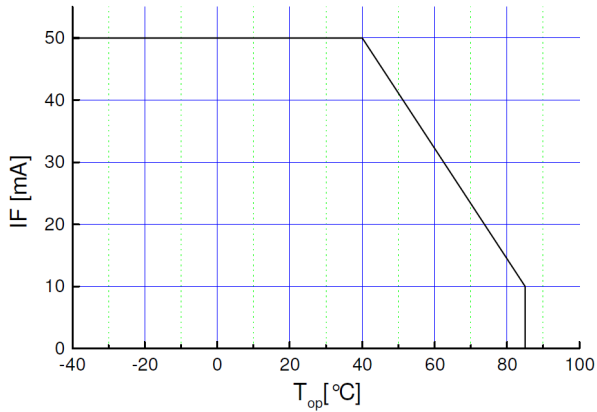
\* tp ≤ 100 us, T=1:10

### Electrical & Optical Characteristics (Ta = 25°C)

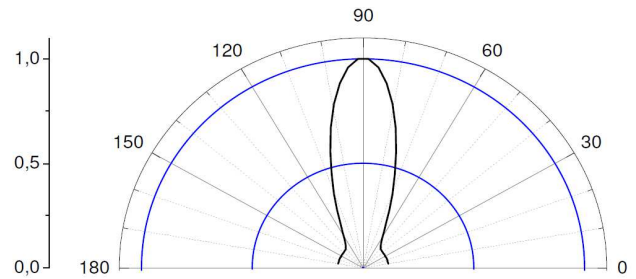
ITEMS	SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
Forward Current	If		--	--	50	mA
Forward Voltage	Vf	If=50mA	--	0.75	1.3	V
Peak Wavelength	λp	If=50mA	1600	1650	1700	nm
Power Output	Po	If=50mA	--	3	--	mW
Spectral Width	Δλ0.5	If=50mA	--	130	--	nm
Viewing Angle	φ	If=50mA	--	50	--	deg
Temperature Coefficient	TCΦe	If=20mA	--	-0.4	--	%/K
Temperature Coefficient	TCλp	If=20mA	--	+0.5	--	nm/K

Package Dimensions

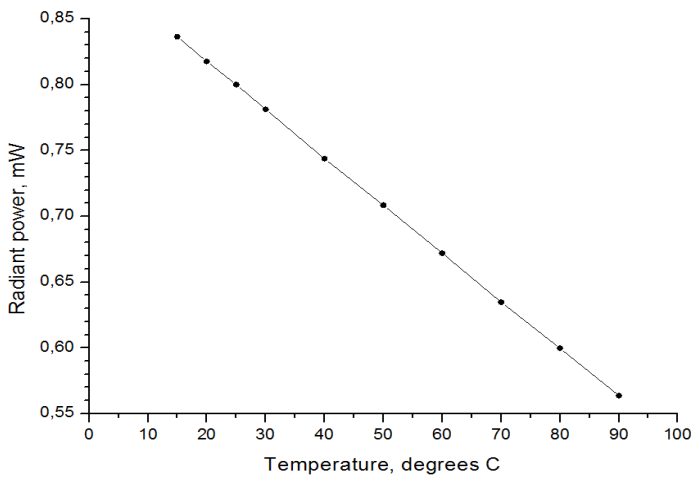




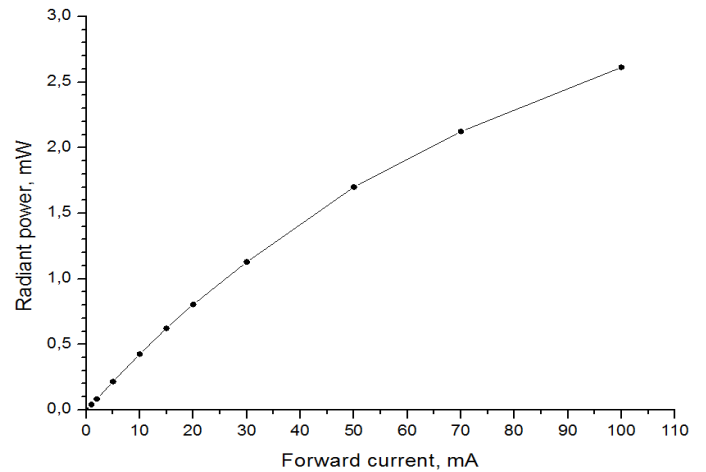
**Maximal forward current (DC) characteristic**



**View angle**

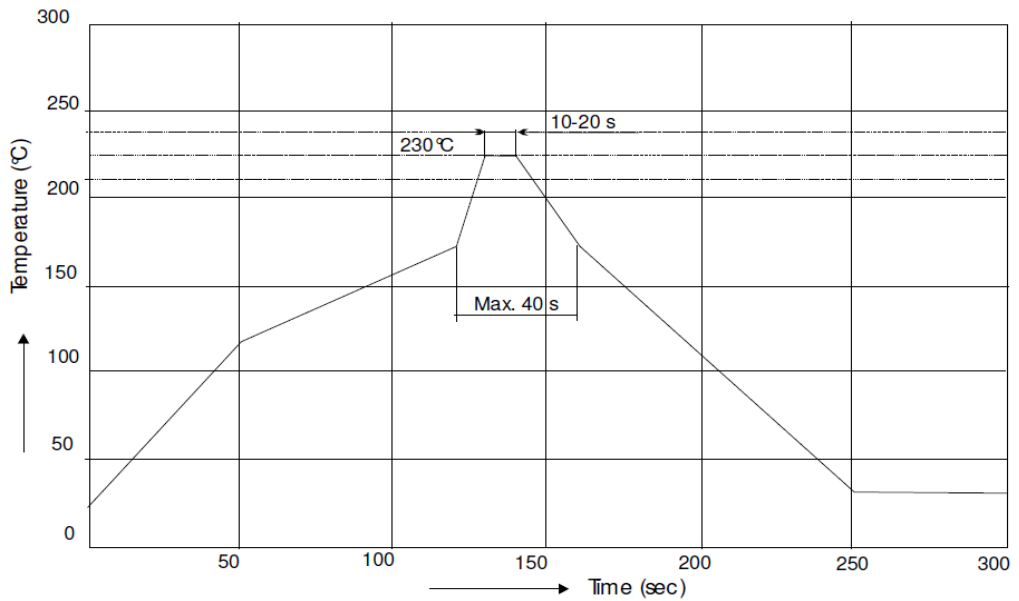


**Radiant power vs. temperature @ 20 mA**

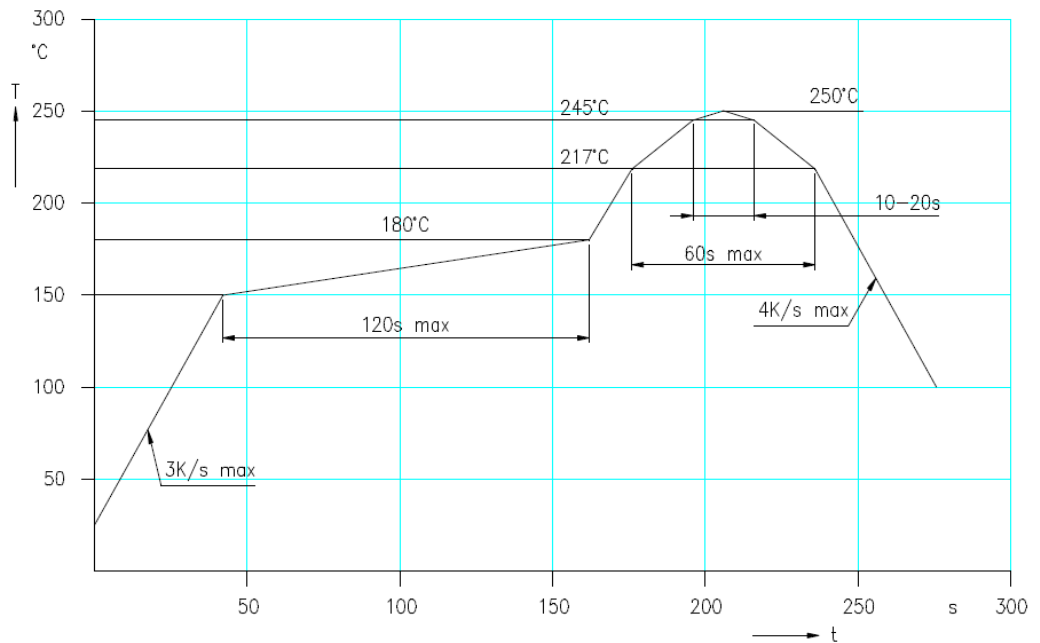


**Radiant power vs. forward current**

**IR reflow soldering profile**



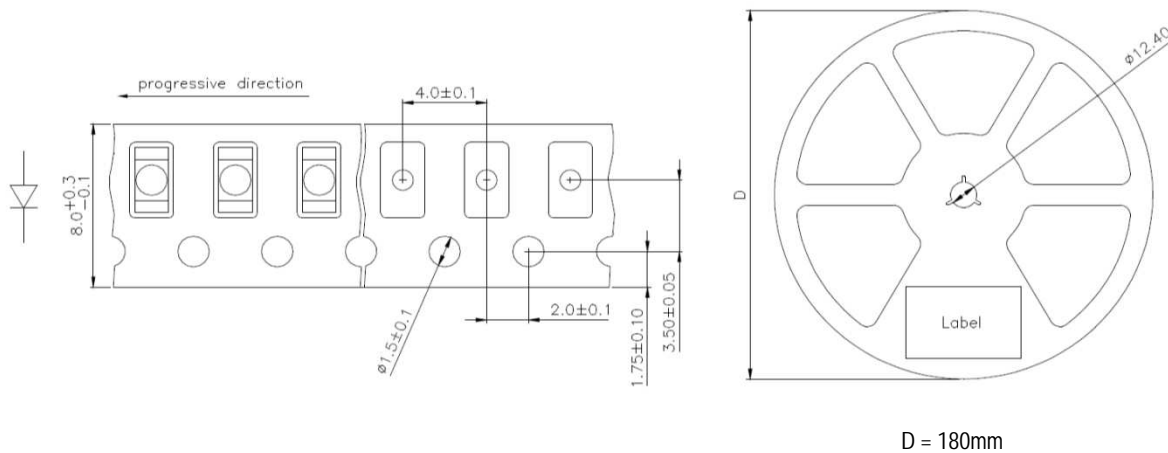
**IR reflow soldering profile for lead free soldering**



**Manual soldering:**  
max power of iron 25 W / 3 s / 300°C

Measured according to CIE 127. All SMD-LEDs are 100% measured and selected on full automated equipment with an accuracy of  $\pm 11\%$ .

**Tape and Reel packing**



Tape and Reel -Suffice to the part number	
Ex:	MTXXXXX-T05 = 500 piece reel
Code	Components per reel
T05	500
T1	1000
T2	2000
T25	2500
T3	3000

**Packing:** The reel is seaLED in special plastic bag with integrate ESD protection (MIL - STD 81705) including a silica dry-pack