

## Serie 150 – 1206 high temperature

### OIS-150 880-XB

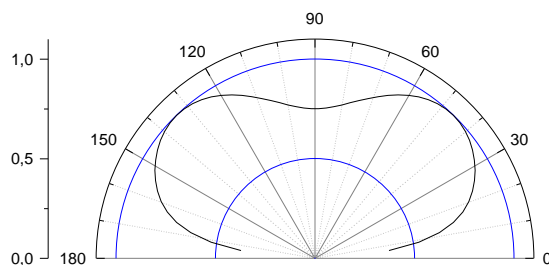
#### Features

- size: 3,2(L) x 1,6(W) x 1,2(H) mm
- circuit substrate: glass laminated epoxy
- devices are ROHS and REACH conform
- lead free solderable, soldering pads: gold plated
- taped in 8 mm blister tape, cathode to transporting perforation
- all devices sorted into luminous intensity classes
- high radiation intensity types
- taping: face-up (T) or face-down (TD) possible

## Electro-Optical Characteristics

Measured at  $T_a = 25^\circ\text{C}$

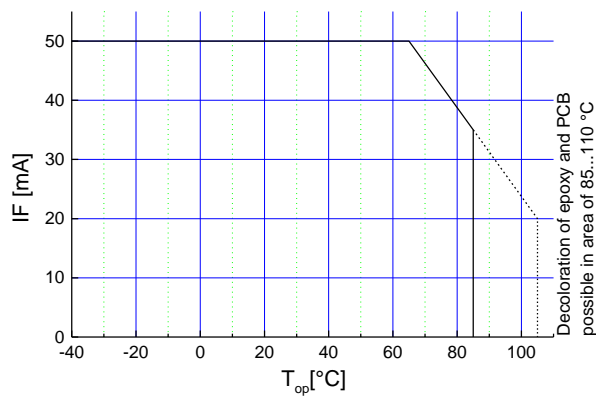
Parameter	Symbol	Values			Units
		min	typ	max	
Emitting Color		infrared			
Forward Voltage	$V_F$		1.4	1.6	V
Forward Current	$I_F$		50		mA
Peak Wavelength	$\lambda_P$	855	870	885	nm
Radiant Intensity	$I_e$	1.4	2.6		mW/sr



view angle

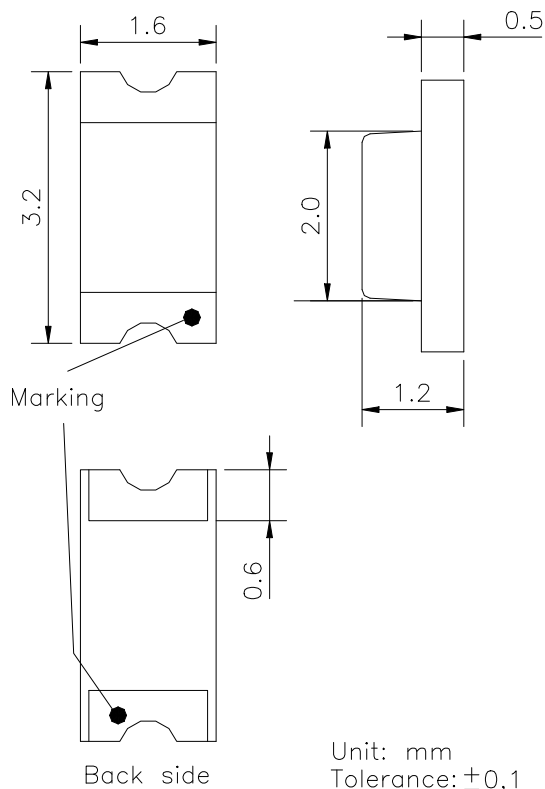
## Absolute Maximum Ratings

Parameter	Symbol	Values		Units
		min	max	
Forward Current	$I_{F,max}$		50	mA
Forward Current, pulsed $t_p \leq 100\mu s, \tau = 1:10$	$I_{F,p}$		250	mA
Reverse Voltage	$V_R$		5	V
Reverse Current	$I_R$		100	$\mu A$
Thermal Resistance	$R_{th,JA}$		450	K/W
Operating Temperature	$T_{Op}$	-40	+110	$^{\circ}C$
Storage Temperature	$T_{St}$	-55	+110	$^{\circ}C$

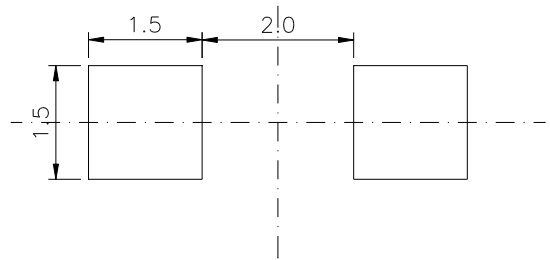


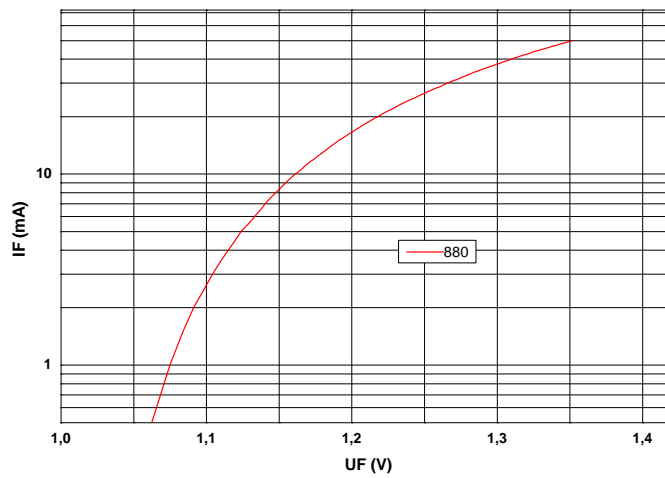
maximal forward current (DC) characteristic

## Outline Drawing

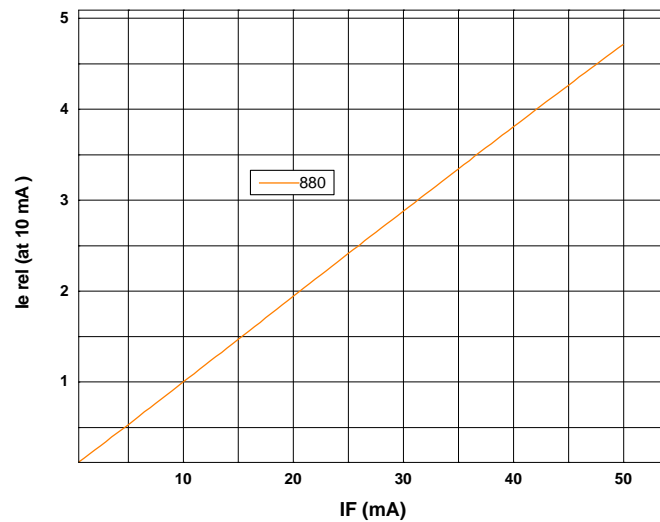


## Recommended Soldering Patterns

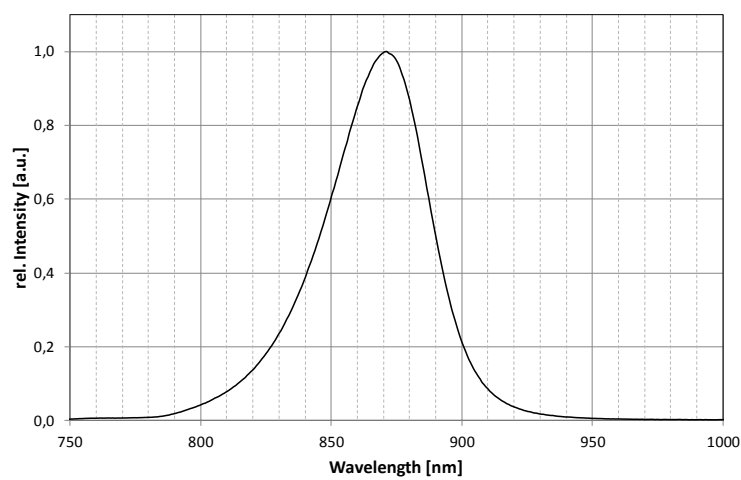




$U_F - I_F$   
characteristic

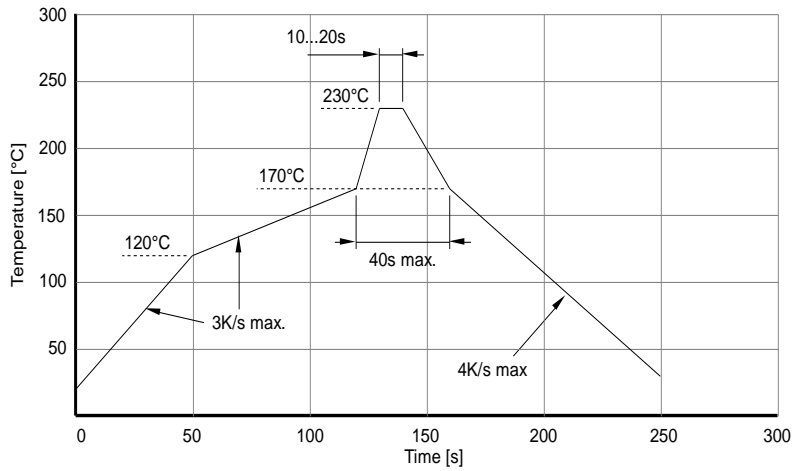


$I_F - I_{v, rel}$   
characteristic

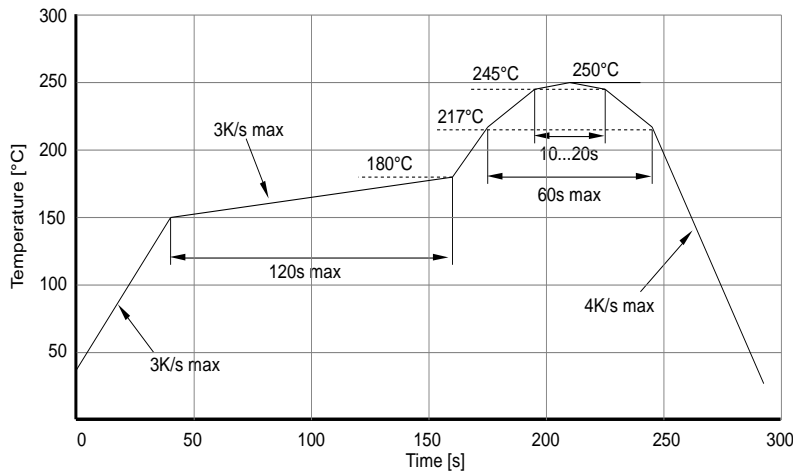


Spectrum  
@ 50 mA

## Soldering Conditions



IR reflow soldering profile



IR reflow soldering profile for lead free soldering

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

## Ordering Code For Parts

Series	Color	Encapsulation	Packaging
OIS-150	???????	?	?
			T – taped up TD – taped down
		XB - uncolored clear	

Type definition, e.g. OIS-150 880-XB

## LED Radiant Intensity Groups And Subgroups [mW/sr]

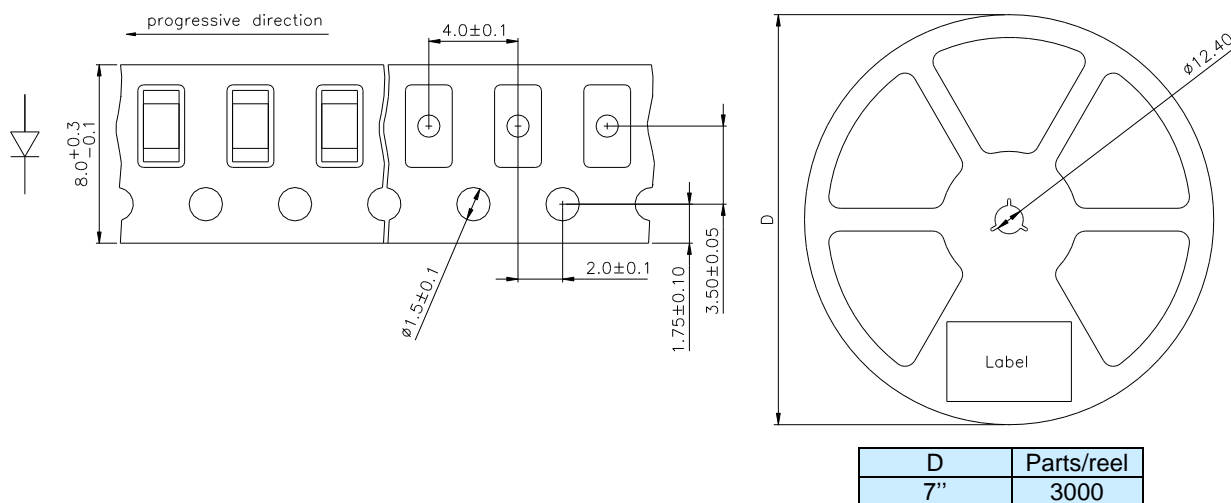
(general information – not this device specific)

C:	0.28	-	0.45	C1:	0.28	-	0.36
				C2:	0.36	-	0.45
D:	0.45	-	0.71	D1:	0.45	-	0.56
				D2:	0.56	-	0.71
E:	0.71	-	1.12	E1:	0.71	-	0.90
				E2:	0.90	-	1.12
F:	1.12	-	1.80	F1:	1.12	-	1.40
				F2:	1.40	-	1.80
G:	1.80	-	2.80	G1:	1.80	-	2.24
				G2:	2.24	-	2.80
H:	2.80	-	4.50	H1:	2.80	-	3.55
				H2:	3.55	-	4.50
J:	4.50	-	7.10	J1:	4.50	-	5.60
				J2:	5.60	-	7.10
K:	7.10	-	11.20	K1:	7.10	-	9.00
				K2:	9.00	-	11.20
L:	11.20	-	18.00	L1:	11.20	-	14.00
				L2:	14.00	-	18.00
M:	18	-	28	M1:	18.00	-	22.40
				M2:	22.40	-	28.00
N:	28	-	45	N1:	28.00	-	35.50
				N2:	35.50	-	45.00

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

**Special service: Brightness selection in sub selections possible.  
Color selection in 3 sub selections possible (each subgroup per reel).**

## Tape And Reel Packing



**Packing:** The reel is sealed in special plastic bag with integrate ESD protection ( MIL - STD 81705 ) including a silica dry-pack  
 MSL level acc. to IPC/JEDEC J-STD 020D:  
 Level 2 for Europe  
 Level 2a for all other countries

### Label

Order No. XXXXXXXXXX

Customer order No.

Type ?????-??-T

Intensity group ZZ Color class: CC

Color class - optional

Charge No. 1122-AAAAAA

11 Week – 22 year – A internal identification

Quantity 9999

### Attention please:

The information describes the type of component and shall not considered as assured characteristics. Terms of delivery and rights to change reserved. Due to technical requirements components may contain dangerous substances. The data sheet may changed without prior information; the valid issue will be on our webpage in internet. Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer. OSA opto light does not have the responsibility for the reliability and the degradation behaviour of products made with OSA opto light diodes because they depend not only on the diode but also on the conditions of manufacture or design of the final products.

Packaging: Please use the recycling operators known to you.

Components used in life support devices or systems, toys and safety systems must be expressly authorized for such purpose!