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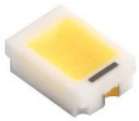
Series 400 - Ceramics

white - high CRI



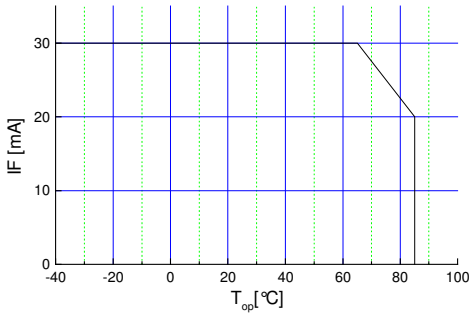
preliminary

Features

- size 3.0(L) x 2.0(W) x 1.0(H) mm
- circuit substrate: Al2O3 Ceramics
- devices are ROHS 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
- taping: face-up (T)
- high luminous intensity types
- sorted in color classes

Absolute Maximum Ratings

$I_{F, max}$[mA]	$I_{F,P}$ [mA] tp ≤ 100 µs τ=1: 10	V_R [V]	$I_{R, max}$ [µA]	Thermal resistance R_{thJA} [K / W]	T_{Op} [°C]	T_{St} °[C]
30	120	5	100	60	-40...85	-40...110

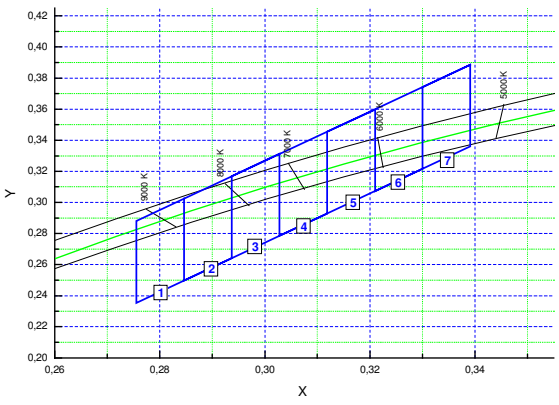


Maximal forward current (DC) characteristic

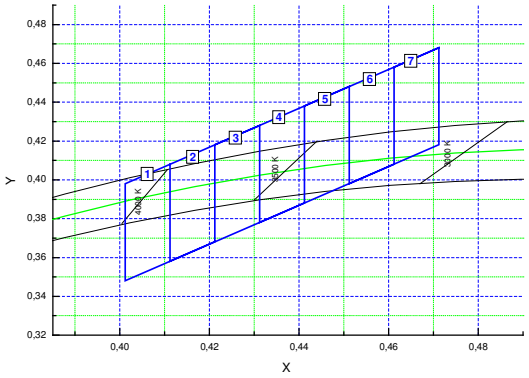
electrostatic discharge classification (MIL-STD-883E) **class 1**

Electro-Optical Characteristics

Type	Emitting color	Marking at	Measurement I_F [mA]	V_F[V] typ	V_F[V] max	color coordinates	I_V[mcd] min	I_V[mcd] typ
OCL-400 SWW	warm white	anode	20	3.2	3.6	CRI /80%	350	500
OCL-400 SW	cool white	anode	20	3.2	3.6	CRI /95%	400	600

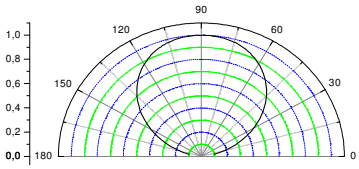


cool white

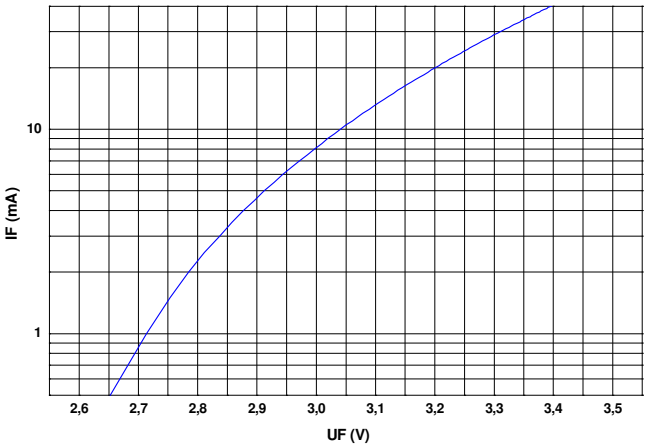


warm white

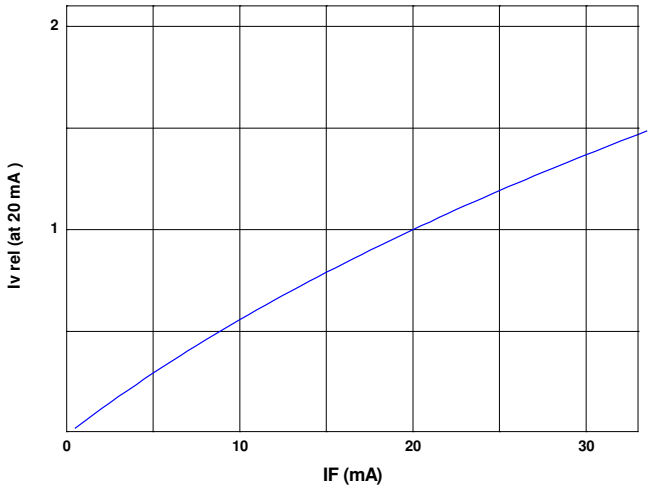
color coordinates classes



view angle

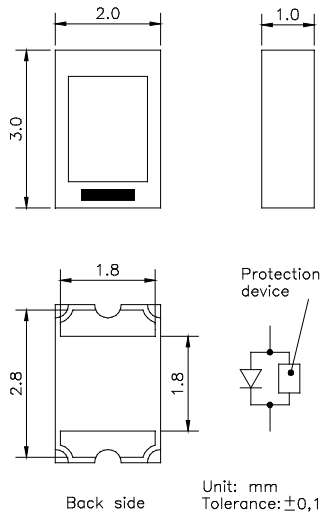


$U_F - I_F$ characteristic

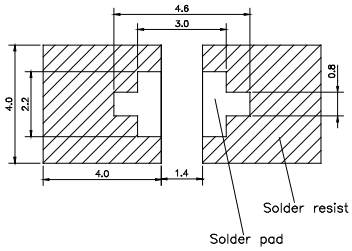


$I_F - I_{v,\,rel}$ characteristic

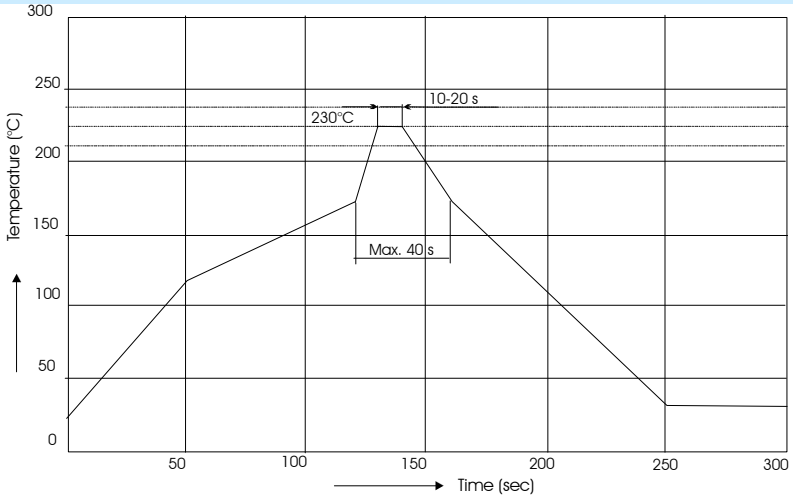
Outline Drawing



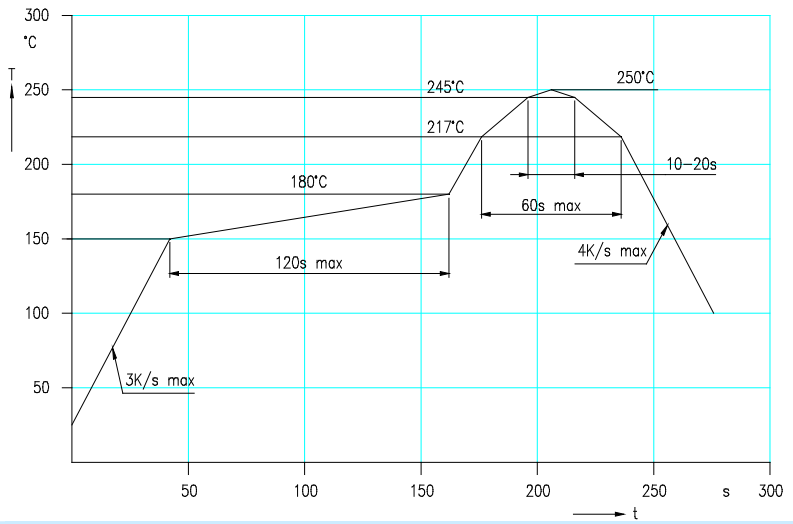
Recommended Soldering Patterns



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
OCL-400	-	???????	-	XD	-	T

T - taped

XD - uncolored diffused

Type definition, e.g. OCL-400 SWW-XD-T

LED Luminous Intensity Groups And Subgroups [mcd]

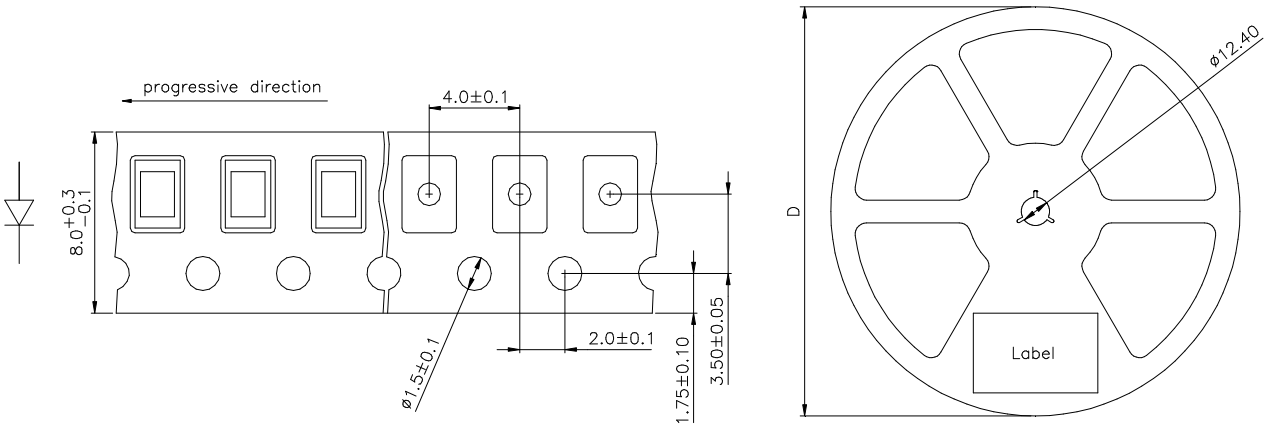
(general information – not this device specific)

C:	0.28	-	0.45	C1:	0.28	-	0.36	Q1:	71	-	90
D:	0.45	-	0.71	C2:	0.36	-	0.45	Q2:	90	-	112
E:	0.71	-	1.12	D1:	0.45	-	0.56	R1:	112	-	140
F:	1.12	-	1.80	D2:	0.56	-	0.71	R2:	140	-	180
G:	1.80	-	2.80	E1:	0.71	-	0.90	S1:	180	-	224
H:	2.80	-	4.50	E2:	0.90	-	1.12	S2:	224	-	280
J:	4.50	-	7.10	F1:	1.12	-	1.40	T1:	280	-	355
K:	7.10	-	11.20	F2:	1.40	-	1.80	T2:	355	-	450
L:	11.20	-	18.00	G1:	1.80	-	2.24	U1:	450	-	560
				G2:	2.24	-	2.80	U2:	560	-	710
M:	18	-	28	H1:	2.80	-	3.55	V1:	710	-	900
N:	28	-	45	H2:	3.55	-	4.50	V2:	900	-	1120
P:	45	-	71	J1:	4.50	-	5.60	W1:	1120	-	1420
Q:	71	-	112	J2:	5.60	-	7.10	W2:	1420	-	1800
R:	112	-	180	K1:	7.10	-	9.00	X1:	1800	-	2250
S:	180	-	280	K2:	9.00	-	11.20	X2:	2250	-	2800
T:	280	-	450	L1:	11.20	-	14.00	Y1:	2800	-	3550
U:	450	-	710	L2:	14.00	-	18.00	Y2:	3550	-	4500
V:	710	-	1120	M1:	18.00	-	22.40	Z1:	4500	-	5750
W:	1120	-	1800	M2:	22.40	-	28.00	Z2:	5750	-	7100
X:	1800	-	2800	N1:	28.00	-	35.50				
Y:	2800	-	4500	N2:	35.50	-	45.00				
Z:	4500	-	7100	P1:	45.00	-	56.00				
				P2:	56.00	-	71.00				

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

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

Tape And Reel Packing



D	Parts/reel
180 mm	2000
330 mm	8000

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

Label

Order No.	XXXXXXXXX		Customer order No.
Type	OCL-400 ?????-??-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 and safety systems must be expressly authorized for such purpose!