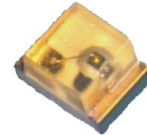


Series 176 - 0805 low current

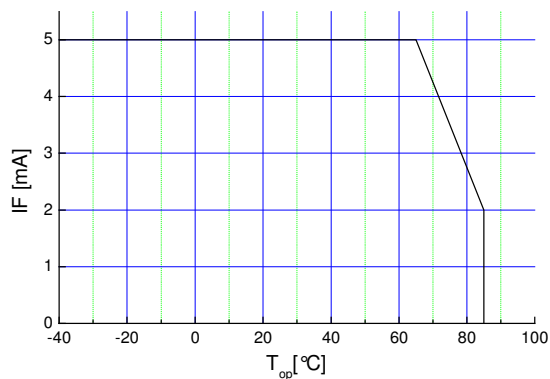
Features

- size 0805: 1.9(L) x 1.2(W) x 1.2(H) mm
- low current
- 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 sorted into luminous intensity classes



Absolute Maximum Ratings

$I_{F, max}$ [mA]	$I_{F, P}$ [mA] $t_p \leq 100 \mu s$ $\tau=1: 10$	V_R [V]	I_R, max [μA]	Thermal resistance R_{thJA} [K / W]	T_{Op} [$^{\circ}C$]	T_{St} [$^{\circ}C$]
5	20	5	100	500	-40...85	-40...100



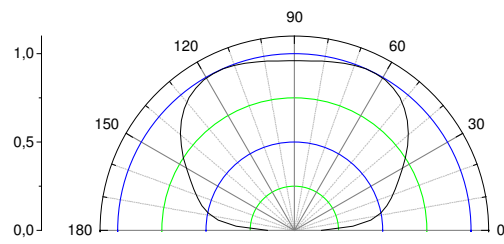
Maximal forward current (DC) characteristic

electrostatic discharge classification (MIL-STD-883E)

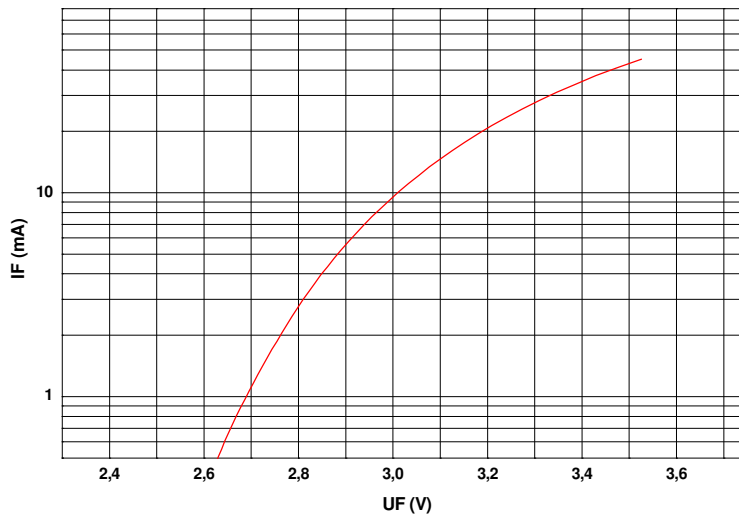
class 1

Electro-Optical Characteristics

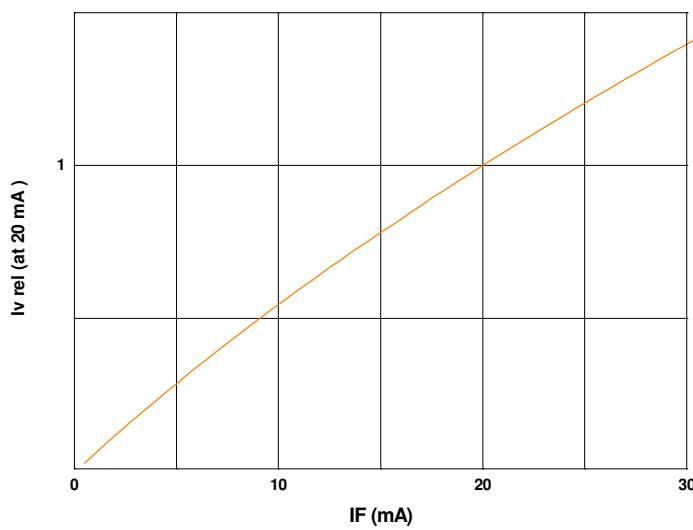
Type	Emitting color	Marking at	Measurement I_F [mA]	V_F [V]		λ_d / λ_p^* [nm]	I_v [mcd]	
				typ	max		min	typ
OLS-176 BA460	blue	cathode	2	2.7	3.2	460	4.0	6.0



view angle

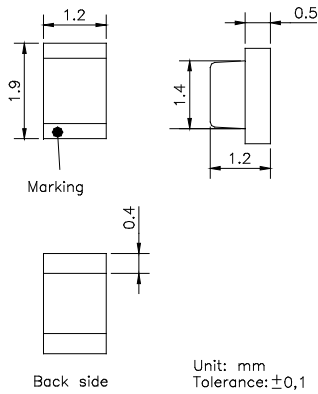


$U_F - I_F$
characteristic

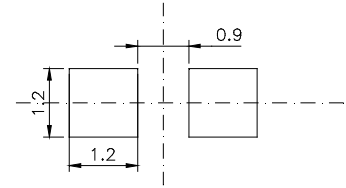


$I_F - I_{v,rel}$
characteristic

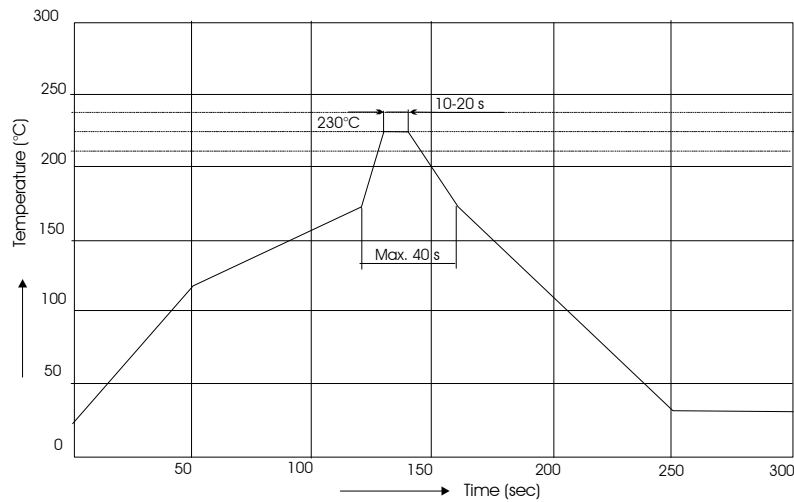
Outline Drawing



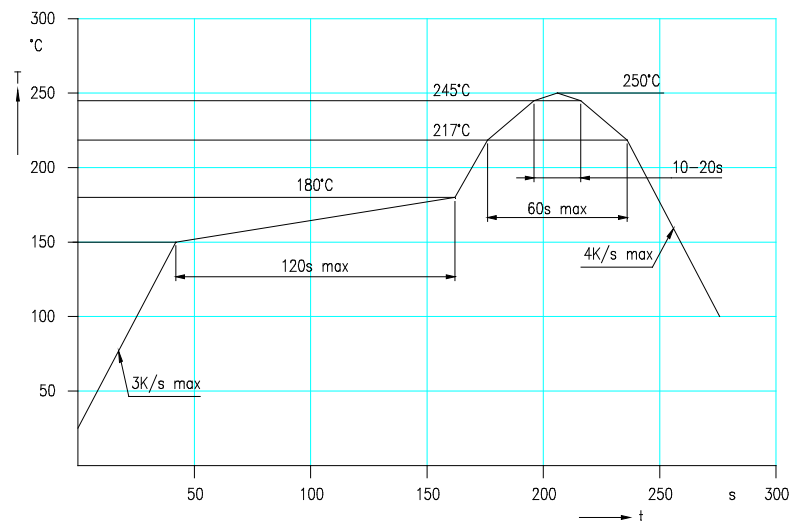
Recommended Soldering Patterns



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

OLS-176

- ????????

- ?

- T

T - taped

C - colored (standard) possible for red. green. blue
 XD - uncolored diffused
 CD - colored diffused possible for red. green. blue
 X - uncolored clear

Type definition, e.g. OLS-176 BA460-C -T

LED Luminous Intensity Groups And Subgroups [mcd]

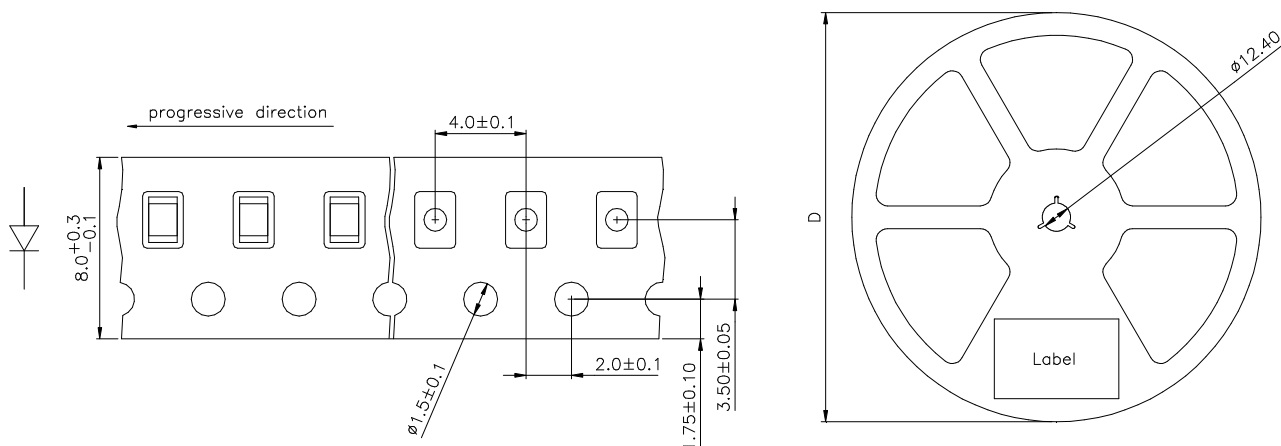
(general information – not this device specific)

C:	0.28	-	0.45	C1:	0.28	-	0.36	P1:	45	-	56
D:	0.45	-	0.71	C2:	0.36	-	0.45	P2:	56	-	71
E:	0.71	-	1.12	D1:	0.45	-	0.56	Q1:	71	-	90
F:	1.12	-	1.80	D2:	0.56	-	0.71	Q2:	90	-	112
G:	1.80	-	2.80	E1:	0.71	-	0.90	R1:	112	-	140
H:	2.80	-	4.50	E2:	0.90	-	1.12	R2:	140	-	180
J:	4.50	-	7.10	F1:	1.12	-	1.40	S1:	180	-	224
K:	7.10	-	11.20	F2:	1.40	-	1.80	S2:	224	-	280
L:	11.20	-	18.00	G1:	1.80	-	2.24	T1:	280	-	355
M:	18	-	28	G2:	2.24	-	2.80	T2:	355	-	450
N:	28	-	45	H1:	2.80	-	3.55	U1:	450	-	560
P:	45	-	71	H2:	3.55	-	4.50	U2:	560	-	710
Q:	71	-	112	J1:	4.50	-	5.60	V1:	710	-	900
R:	112	-	180	J2:	5.60	-	7.10	V2:	900	-	1120
S:	180	-	280	K1:	7.10	-	9.00	W1:	1120	-	1420
T:	280	-	450	K2:	9.00	-	11.20	W2:	1420	-	1800
U:	450	-	710	L1:	11.20	-	14.00	X1:	1800	-	2250
V:	710	-	1120	L2:	14.00	-	18.00	X2:	2250	-	2800
W:	1120	-	1800	M1:	18.00	-	22.40	Y1:	2800	-	3550
X:	1800	-	2800	M2:	22.40	-	28.00	Y2:	3550	-	4500
Y:	2800	-	4500	N1:	28.00	-	35.50	Z1:	4500	-	5750
Z:	4500	-	7100	N2:	35.50	-	45.00	Z2:	5750	-	7100

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 sub selections possible.
 Color selection in 3 sub selections possible (each subgroup per reel).**

Tape And Reel Packing



D	Parts/reel
180 mm	3000
330 mm	12000

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

Label

Order No.	XXXXXXXXXX	Customer order No.
Type	OLS-176 ?????-??-T	
Intensity group	ZZ	Color class: CC
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!