

Series 172 - 0805 - Bipolar monocolor

High luminous intensity

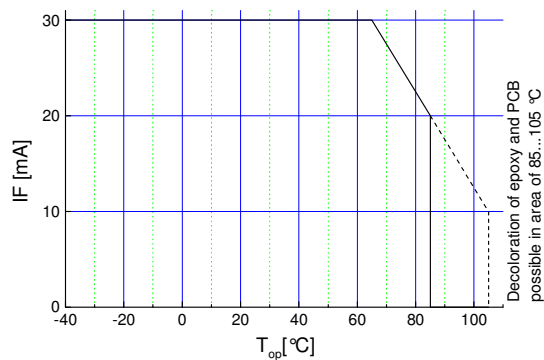
Features

- size 0805: 1,9(L) x 1,2(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
- all devices sorted into luminous intensity classes
- high luminous intensity types
- on request sorted in color classes



Absolute Maximum Ratings

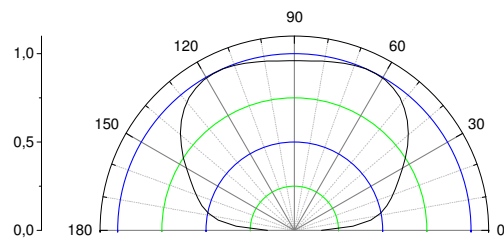
$I_{F, max}$ [mA]	$I_{F, P}$ [mA] $tp \leq 100 \mu s$ $\tau = 1: 10$	V_R [V]	I_R, max [μA]	Thermal resistance R_{thJA} [K / W]	T_{Op} [$^{\circ}C$]	T_{St} [$^{\circ}C$]
30	100	5	100	500	-40...105	-55...105



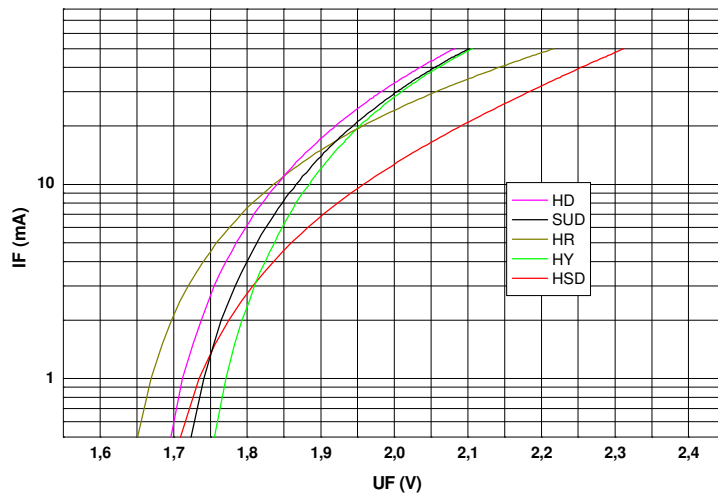
Maximal forward current (DC) characteristic

Electro-Optical Characteristics

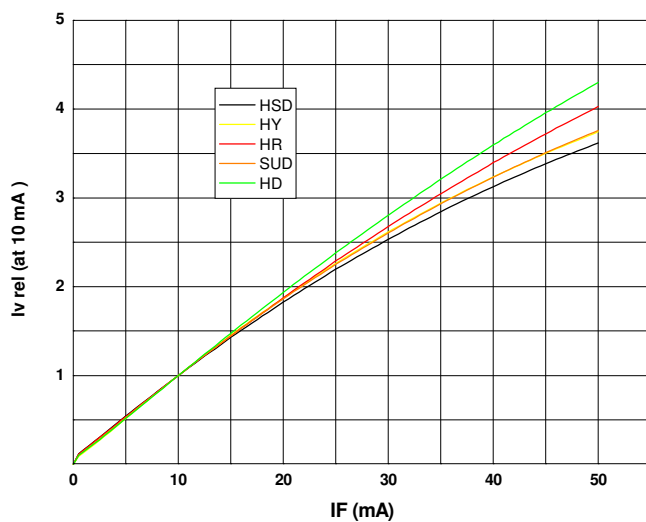
Type	Emitting color	Marking at	Measurement I_F [mA]	V_F [V]		λ_d / λ_p^* [nm]	I_v [mcd]	
				typ	max		min	typ
OLS-172 HY/HY	hyper yellow	-	20	2,0	2,6	590	60	150
OLS-172 SUD/SUD	super orange	-	20	2,0	2,6	605	60	130
OLS-172 HD/HD	hyper orange	-	20	2,0	2,6	615	60	150
OLS-172 HSD/HSD	hyper TSN red	-	20	2,1	2,6	625	60	120
OLS-172 HR/HR	hyper red	-	20	2,0	2,6	632	40	85



view angle

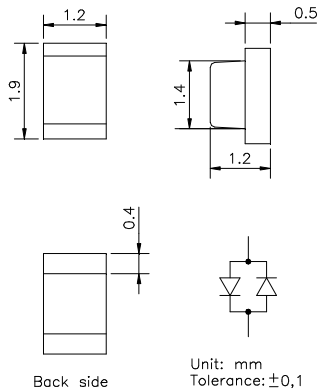


$U_F - I_F$
characteristic

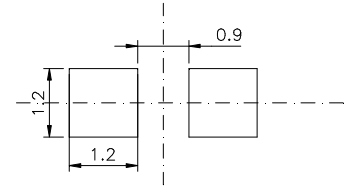


$I_F - I_{v,rel}$
characteristic

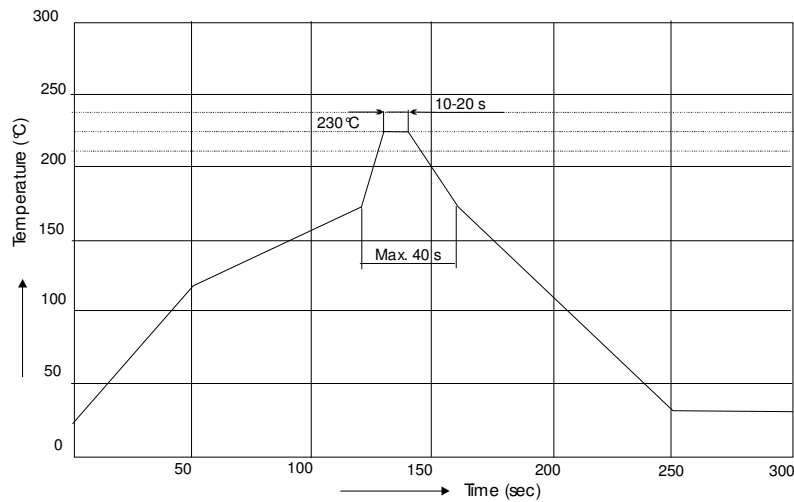
Outline Drawing



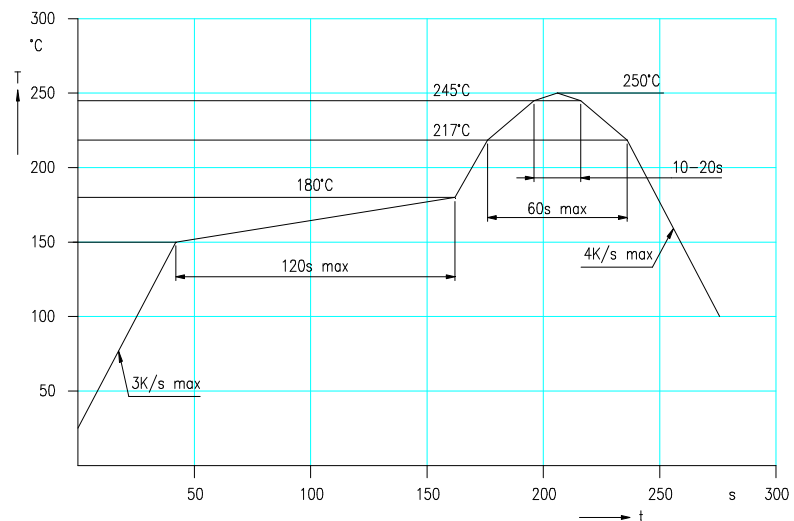
Recommended Soldering Patterns



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-172	???????	?	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-172 HY/HY-X-T

LED Luminous Intensity Groups And Subgroups [mcd]

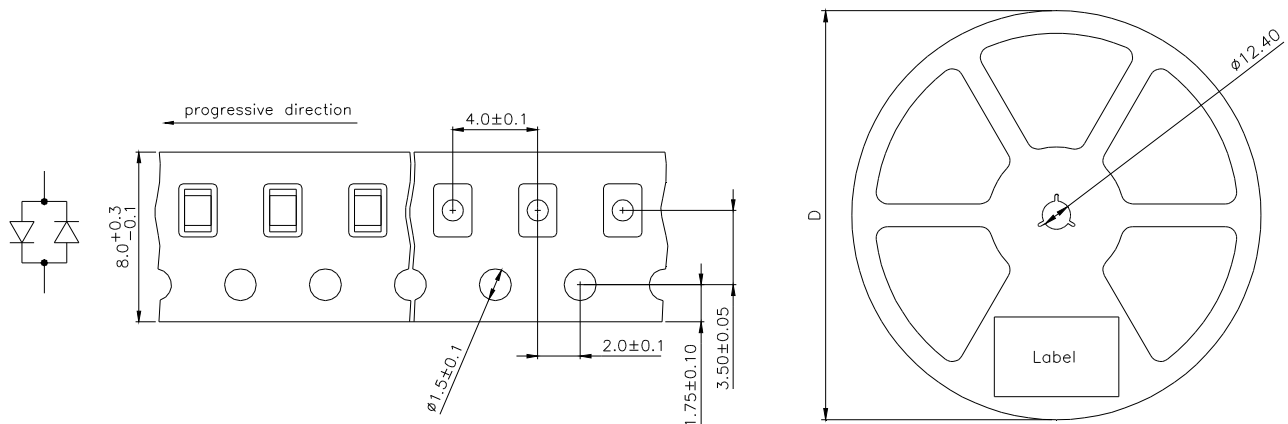
(general information – not this device specific)

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 $\pm 11\%$.

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

Tape And Reel Packing



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-172 ?????-??-T	
Intensity group	ZZ	Color class - optional
	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.

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!