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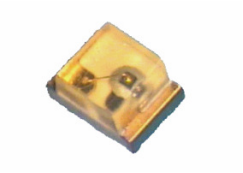
preliminary

Series 170 - 0805 Standard

IR high intensity 660-850 nm

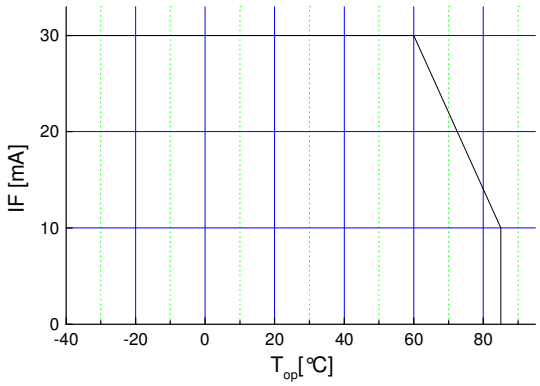


Features

- 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, cathode to transporting perforation
- all devices sorted into luminous intensity classes
- high radiation intensity types

Absolute Maximum Ratings

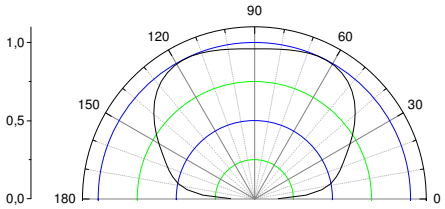
$I_{F, max}$[mA]	$I_{F,P}$ [mA] tp ≤ 100 µs τ=1: 10	V_R [V]	$I_{R, max}$ [µA]	Thermal resistance R_{thJA} [K / W]	T_{Op} [°C]	T_{St} °[C]
30	150	5	100	500	-40...85	-55...85



Maximal forward current (DC) characteristic

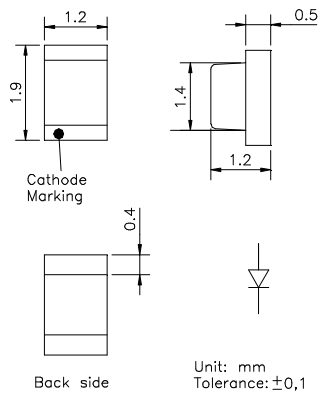
Electro-Optical Characteristics

Type	Marking at	Measurement I_F [mA]	Switching time (rise & fall) typ [ns]	Switching time (rise & fall) max [ns]	V_F[V] typ	V_F[V] max	λ_p [nm]	I_e[mW/sr] min	I_e[mW/sr] typ
OIS-170 660	cathode	30	40	160	1,9	2,2	660 ±8	0.5	1.0
OIS-170 670	cathode	30	40	160	1,9	2,2	670 ±8	0.5	1.0
OIS-170 690	cathode	30	40	160	1,9	2,2	690 ±8	0.5	1.1
OIS-170 700	cathode	30	40	160	1,9	2,2	700 ±8	0.5	1.1
OIS-170 724	cathode	30	40	160	1,8	2,2	724 ±8	0.9	1.8
OIS-170 740	cathode	30	40	160	1,7	2,0	740 ±8	0.9	1.7
OIS-170 770	cathode	30	40	160	1,7	2,0	770 ±8	0.9	1.7
OIS-170 810	cathode	30	35	160	1,6	2,0	810 ±8	1.0	2.0
OIS-170 850	cathode	30	35	160	1,6	2,0	850 ±8	1.0	2.0

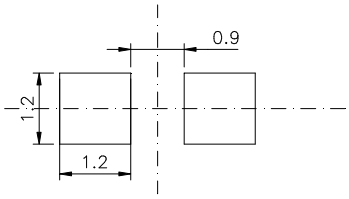


view angle

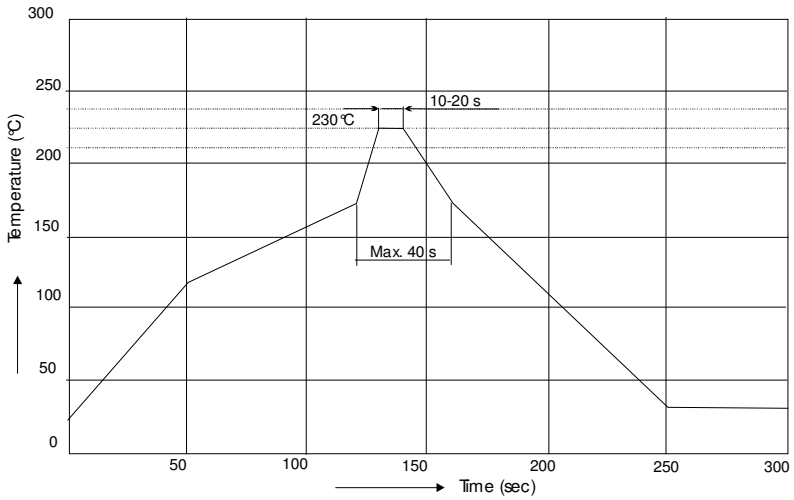
Outline Drawing



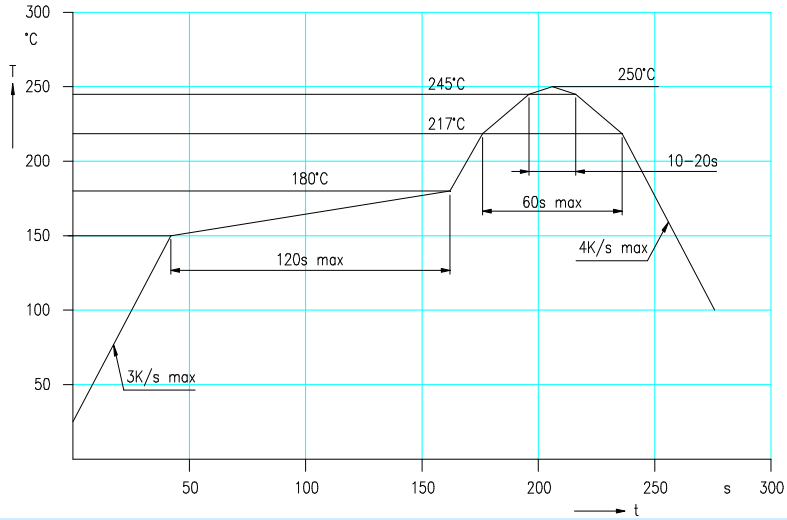
Recommended Soldering Patterns



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
OIS-170	-	???????	-	X	-	T

T - taped

X - uncolored clear

Type definition, e.g. OIS-170 660-X -T

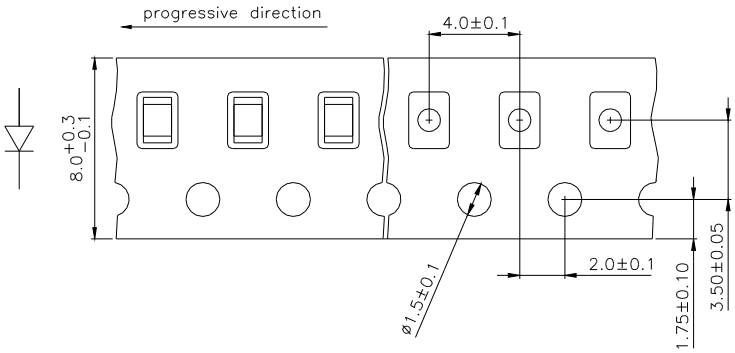
LED Luminous Intensity Groups And Subgroups [mW/sr]

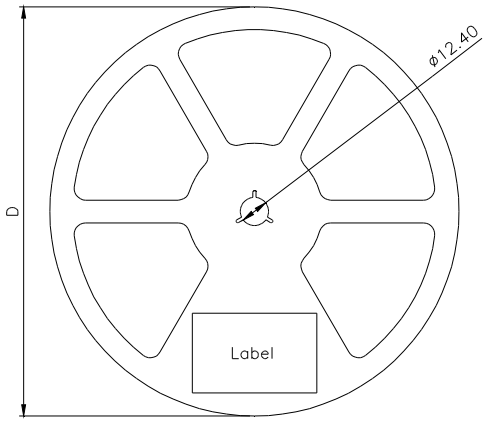
(general information – not this device specific)

C:	0.28	-	0.45	C1:	0.28	-	0.36	J1:	4.50	-	5.60
D:	0.45	-	0.71	C2:	0.36	-	0.45	J2:	5.60	-	7.10
E:	0.71	-	1.12	D1:	0.45	-	0.56	K1:	7.10	-	9.00
F:	1.12	-	1.80	D2:	0.56	-	0.71	K2:	9.00	-	11.20
G:	1.80	-	2.80	E1:	0.71	-	0.90	L1:	11.20	-	14.00
H:	2.80	-	4.50	E2:	0.90	-	1.12	L2:	14.00	-	18.00
J:	4.50	-	7.10	F1:	1.12	-	1.40	M1:	18.00	-	22.40
K:	7.10	-	11.20	F2:	1.40	-	1.80	M2:	22.40	-	28.00
L:	11.20	-	18.00	G1:	1.80	-	2.24	N1:	28.00	-	35.50
M:	18	-	28	G2:	2.24	-	2.80	N2:	35.50	-	45.00
N:	28	-	45	H1:	2.80	-	3.55	P1:	45.00	-	56.00
P:	45	-	71	H2:	3.55	-	4.50	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 %.

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.	XXXXXXXXX	Customer order No.
Type	OIS-170 ?????-??-T	
Intensity group	ZZ	
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!