

Serie 136 – Duplex Bicolor

low current

OLS-136-Y/G
OLS-136-SR/G
OLS-136-SR/Y



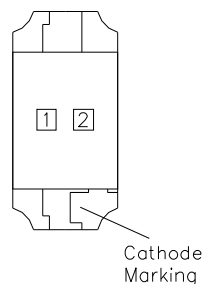
Features

- package 1206
- size: 3.2(L) x 1.6(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. cathodes positions to transporting perforation
- all devices sorted into luminous intensity classes
- taping: face-up (T) or face-down (TD) possible

Electro-Optical Characteristics

Type	Die position	
	1	2
OLS-136 Y/G	Yellow	Green
OLS-136 SR/G	Red	Green
OLS-136 SR/Y	Red	Yellow

Other combinations are possible also



Measured at 2mA, $T_a = 25^\circ\text{C}$

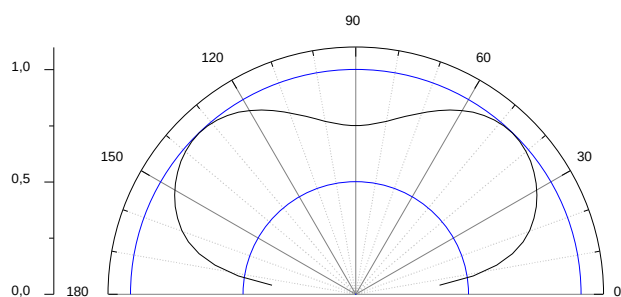
Parameter	Symbol	Emitting Color	Values			Units
			min	typ	max	
Forward Voltage	V_F	G - green		1.9	2.2	V
Dominant Wavelength	λ_D			572		nm
Luminous Intensity	I_V		0.4	1.2		mcd

Parameter	Symbol	Emitting Color	Values			Units
			min	typ	max	
Forward Voltage	V_F	Y - yellow		1.8	2.2	V
Dominant Wavelength	λ_D			590		nm
Luminous Intensity	I_V		0.3	0.6		mcd

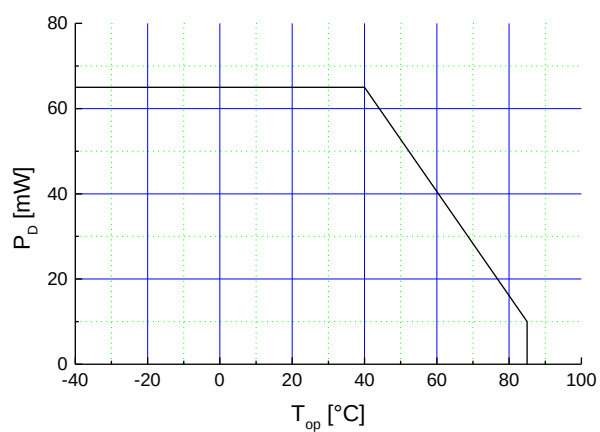
Parameter	Symbol	Emitting Color	Values			Units
			min	typ	max	
Forward Voltage	V_F	SR - red		1.8	2.0	V
Peak Wavelength	λ_P			655		nm
Luminous Intensity	I_V		0.8	2.0		mcd

Absolute Maximum Ratings

Parameter	Symbol	Values		Units
		min	max	
Power dissipation	$P_{V,max}$		65	mW
Forward Current, pulsed $t_p \leq 100\mu s, \tau = 1:10$	$I_{F,p}$		100	mA
Reverse Voltage	V_R		5	V
Reverse Current	I_R		100	μA
Thermal Resistance	$R_{th JA}$		500	K/W
Operating Temperature	T_{Op}	-40	+85	$^{\circ}C$
Storage Temperature	T_{St}	-55	+85	$^{\circ}C$

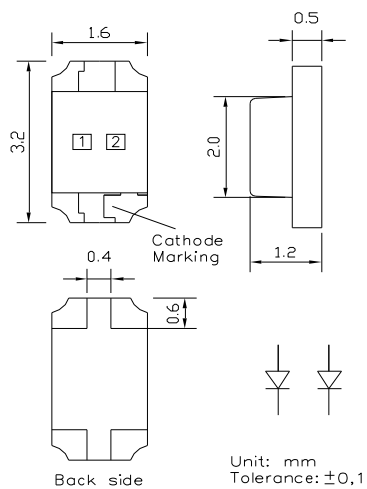


View angle

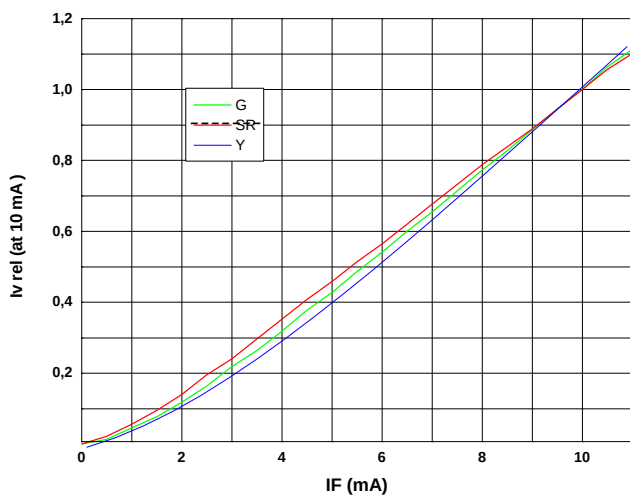
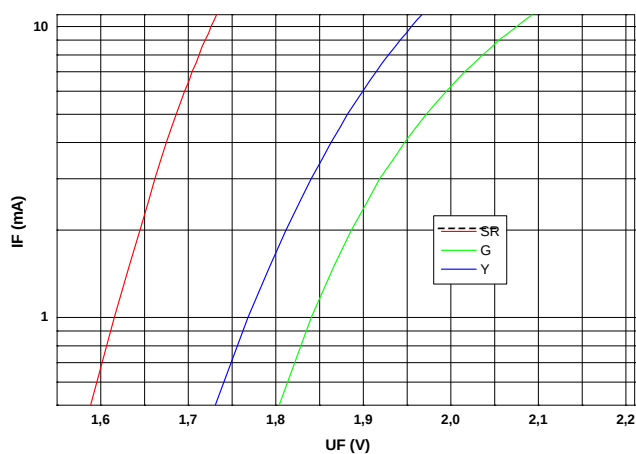
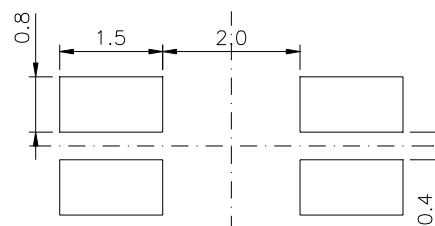


Maximal
forward
current (DC)
characteristic

Outline Drawing



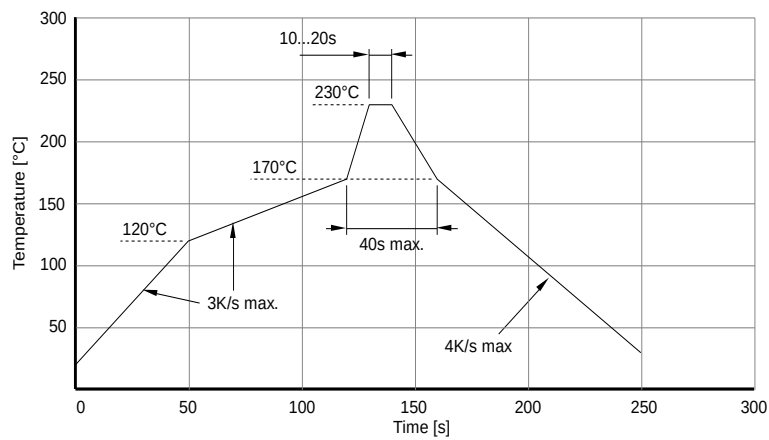
Recommended Soldering Patterns



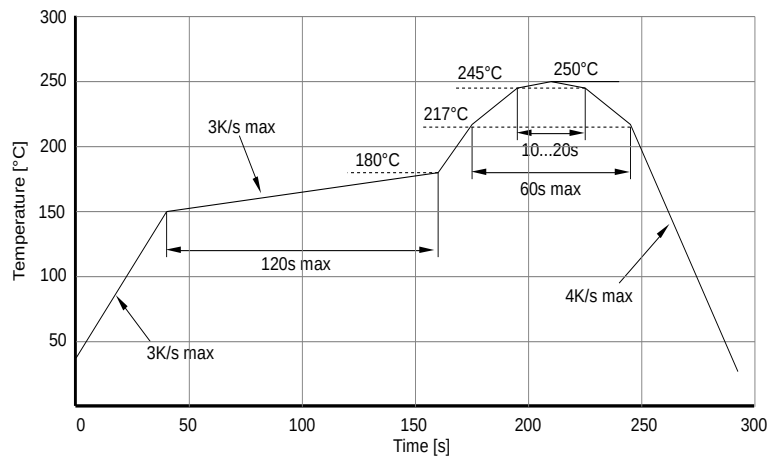
$U_F - I_F$
characteristic

$I_F - I_{v, rel}$
characteristic

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-136	???????	- ?	- ?
			T – taped up
		X – uncolored clear	
		XD – uncolored diffused (standard)	

Type definition, e.g. OLS-136 Y/G –XD-T

LED Luminous Intensity Groups And Subgroups [mcd]

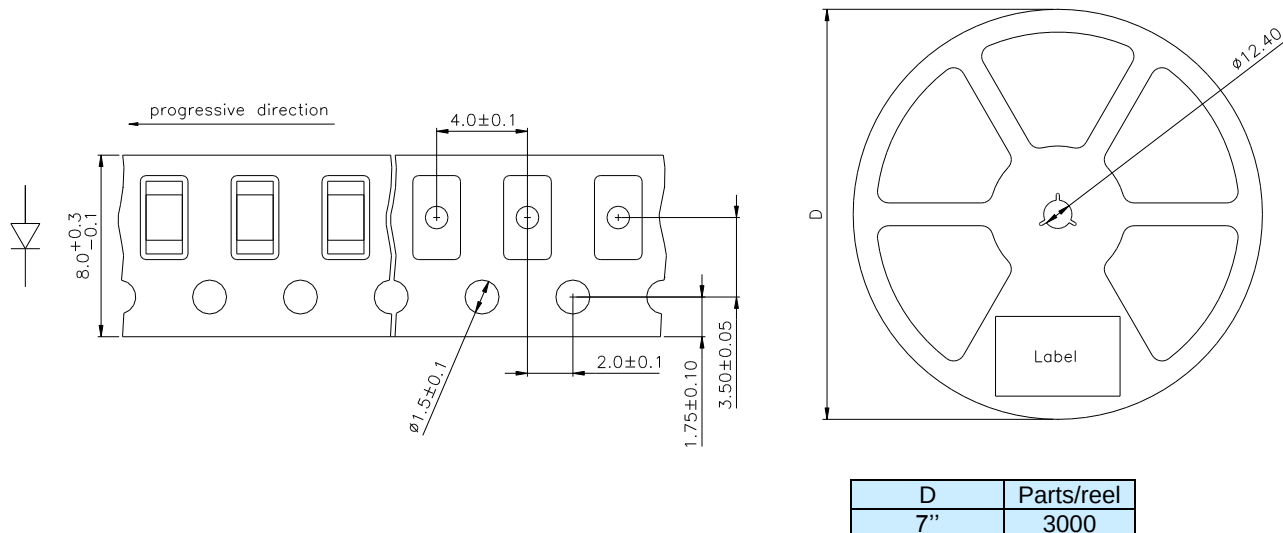
(general information – not this device specific)

C:	0.28	-	0.45	C1:	0.28	-	0.36
				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

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 behavior 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!