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***Series 130 - Duplex bicolor, High intensity***

***OLS-130 MSD / GC525***

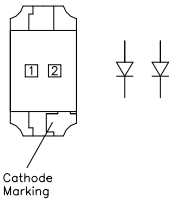
**preliminary**

**Features**
- package 1206
- size: 3.2(L) x 1.6(W) x 1.2(H) mm
- circuit substrate: glass laminated epoxy
- devices are ROHS and REACH 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
- view angle 140°

## *Electro-Optical Characteristics*

| Type | Die position | |
|---|---|---|
| | 1 | 2 |
| OLS-130 MSD/GC525 | red | green |

Other combinations are possible also




Measured at 20mA, $T_a$ = 25°C

| Parameter | Symbol | Type | Values | | | Unit |
|---|---|---|---|---|---|---|
| | | | min | typ | max | |
| Emitting Colour | | MSD | | red | | |
| Forward Voltage | $V_F$ | | | 2.1 | 2.6 | V |
| Dominate Wavelength | $\lambda_D$ | | | 624 | | nm |
| Spectral Width | $\Delta\lambda$ | | | 20 | | nm |
| Luminous Intensity | $I_V$ | | 250 | 400 | | mcd |

| Parameter | Symbol | Type | Values | | | Unit |
|---|---|---|---|---|---|---|
| | | | min | typ | max | |
| Emitting Colour | | GC525 | | green | | |
| Forward Voltage | $V_F$ | | | 3.3 | 4.0 | V |
| Dominate Wavelength | $\lambda_D$ | | | 525 | | nm |
| Spectral Width | $\Delta\lambda$ | | | 20 | | nm |
| Luminous Intensity | $I_V$ | | 280 | 400 | | mcd |

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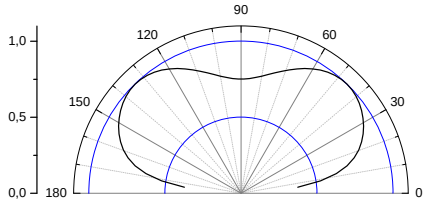
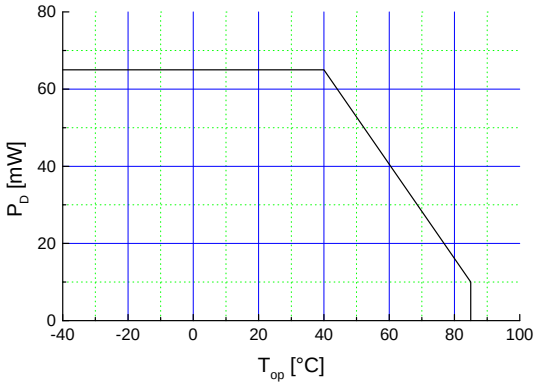
## *Absolute Maximum Ratings*

| Parameter | Symbol | Values | | Unit |
|---|---|---|---|---|
| | | min | max | |
| Power dissipation | $P_{D,max}$ | | 65 | mW |
| Forward Current, pulsed $t_p \leq 100\mu s$, $\tau = 1:10$ | $I_{F,p}$ | | 70 | mA |
| Reverse Voltage | $V_R$ | | 5 | V |
| Reverse Current | $I_R$ | | 100 | µA |
| Thermal Resistance | $R_{thJA}$ | | 500 | K/W |
| Operating Temperature | $T_{Op}$ | -40 | +85 | °C |
| Storage Temperature | $T_{St}$ | -40 | +85 | °C |




view angle




Maximal forward current (DC) characteristic

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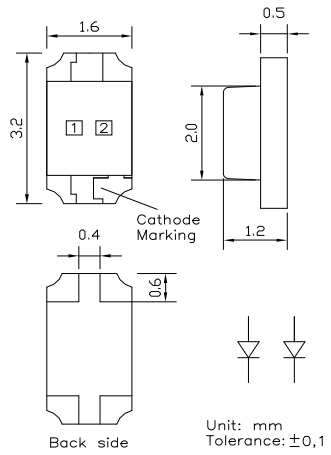
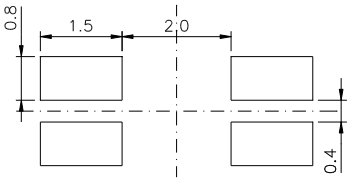
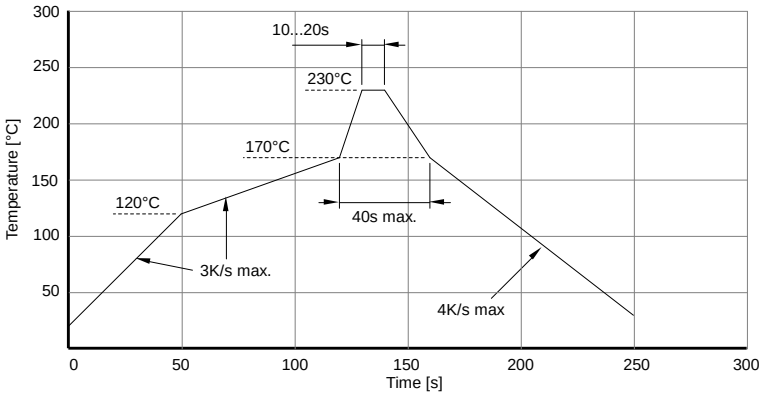
## Outline Drawing



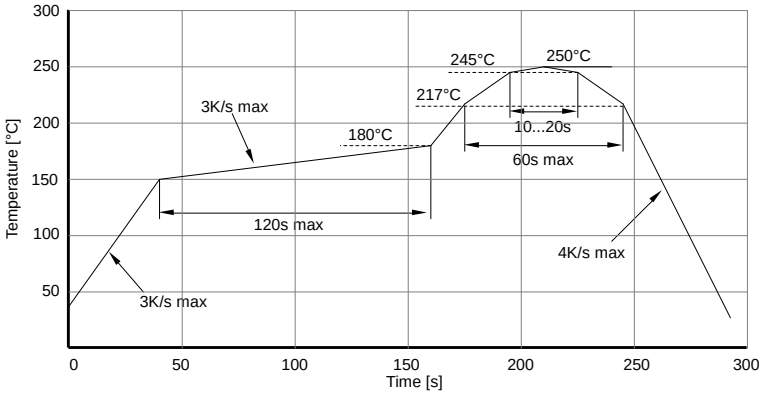

## Recommended Soldering Patterns




## Soldering Conditions




IR reflow soldering profile




IR reflow soldering profile for lead free soldering

Manual soldering: max power of iron 25W/ 3s/ 300°C

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## Ordering Code For Parts

| Series | | Color | | Encapsulation | | Packaging |
|---|---|---|---|---|---|---|
| OLS-130 | - | ??????? | - | ? | - | ? |

T - taped up
TD - taped down

XD - uncolored diffused (standard)
X - uncolored clear

Type definition, e.g. OLS-130 GC525/MSD-XD-T

## LED Luminous Intensity Groups And Subgroups [ mcd ]

(general information – not this device specific)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| N: | 28 | - | 45 | N1: | 28.00 | - | 35.50 |
| | | | | N2: | 35.50 | - | 45.00 |
| P: | 45 | - | 71 | P1: | 45.00 | - | 56.00 |
| | | | | P2: | 56.00 | - | 71.00 |
| Q: | 71 | - | 112 | Q1 : | 71 | - | 90 |
| | | | | Q2 : | 90 | - | 112 |
| R: | 112 | - | 180 | R1 : | 112 | - | 140 |
| | | | | R2 : | 140 | - | 180 |
| S: | 180 | - | 280 | S1 : | 180 | - | 224 |
| | | | | S2 : | 224 | - | 280 |
| T: | 280 | - | 450 | T1 : | 280 | - | 355 |
| | | | | T2 : | 355 | - | 450 |
| U: | 450 | - | 710 | U1 : | 450 | - | 560 |
| | | | | U2 : | 560 | - | 710 |
| V: | 710 | - | 1120 | V1 : | 710 | - | 900 |
| | | | | V2 : | 900 | - | 1120 |
| AW: | 1120 | - | 1800 | AA : | 1120 | - | 1400 |
| | | | | AB : | 1400 | - | 1800 |
| BW: | 1800 | - | 2800 | BA : | 1800 | - | 2240 |
| | | | | BB : | 2240 | - | 2800 |

***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).***

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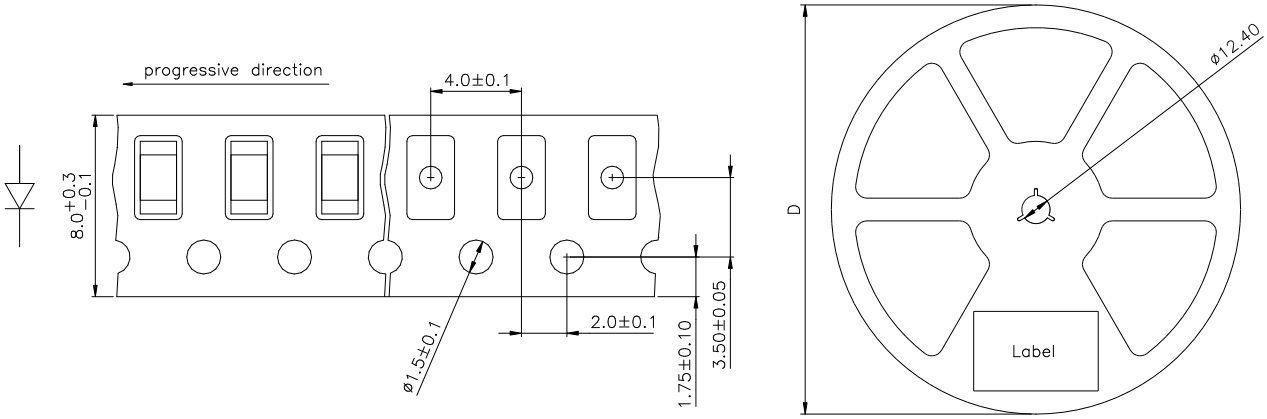
## *Tape And Reel Packing*




| D | Parts/reel |
|---|---|
| 7'' | 3000 |

***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. | XXXXXXXXX | | Customer order No. |
| Type | OLS-130 ?????-??-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, toys and safety systems must be expressly authorized for such purpose!

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