

FYLS – 3528RGBC

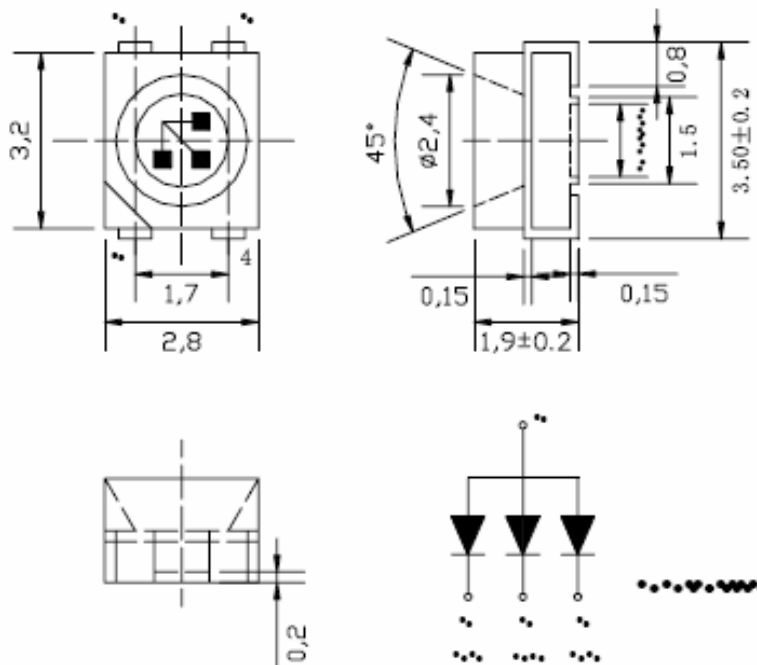
Features:

- Suitable for all SMT assembly and solder process.
- Available on tape and Reel
- Package :2000pcs/ Reel

Description.

- The Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Red Light Emitting Diode.
- The Green source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Green Light Emitting Diode.
- The Blue source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Blue Light Emitting Diode.
- Static electrostatic glove when handling the LEDs.
- It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.
- All devices.equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimension units are millimeters (Inches)
2. All dimension tolerance $\pm 0.2\text{mm}$ unless otherwise noted.
3. An epoxy meniscus may extend about 1.5mm down the leads.

Selection Guide

Part No.	lens type	IV(mcd)@20mA						Viewing Angle
		RED(GaAsP /GaP)		GREEN(GaP)		BLUE(GaP)		
		Min	Typ	Min	Typ	Min	Typ	2θ _{1/2}
FYLS-3528RGBC	Water clear	180	300	280	450	72	115	120

Electrical/Optical Characteristics at Ta=25 °c

Symbol	Parameter	Red		Green		Blue		units	test conditions
		min	typ.	min	typ.	min	typ.		
λd	Dominate wavelength	622	626	520	525	466	470	nm	IF=30mA
C	Capacitance		35		45		45	pF	VF=0V,f=1MHz
VF	Forward Voltage	2.3	2.6	3.2	3.6		3.6	V	IF=30mA
IR	Reverse Current		5		5		5	μA	VR=5V

Absolute Maximum Ratings At= 25 °c

Parameter	Red	Green	Units
Power dissipation	65	95	mW
DC Forward Current	30	25	mA
Peak Forward Current(1)	185	150	mA
Reverse Voltage	5		V
Operating/storage Temperature	-40°C to +85°C		

Note:

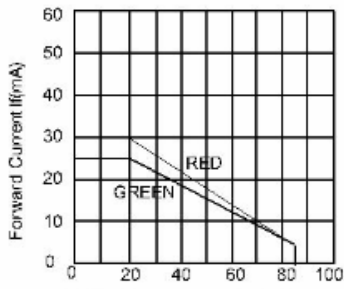
- 1/10 Duty Cycle, 0.1ms Pulse Width.

Reliability Test items And Conditions

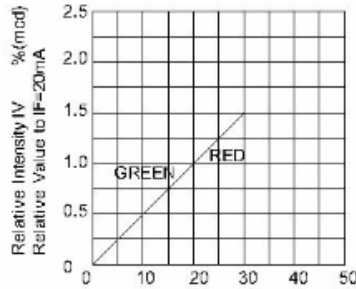
The reliability of products shall be satisfied with items listed below.

Confidence level:90% LTPD:10%

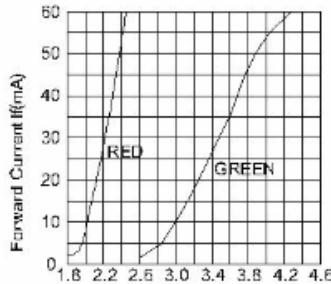
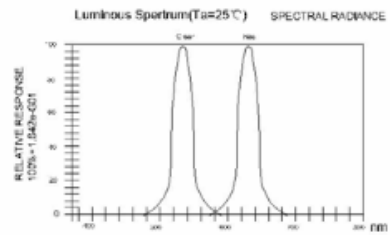
NO.	Items	test condition	test Hours/Cycles	sample Size	Ac/Rc
1	Reflow	Temp:240°C ± 5°C Min:5sec	6Min	22pcs	0/1
2	Temperature cycle	H: +100°C 15min.~5min L:-40°C~ 15min	300 Cycles	22pcs	0/1
3	Thermal shock	H: +100°C 5min.~10sec. L:-10°C 5min	300 Cycles	22pcs	0/1
4	High Temperature Storage	temp:100°C	1000hrs.	22pcs	0/1
5	LOW Temperature Storage	temp:-55°C	1000hrs.	22pcs	0/1
6	DC Operating Life	IF=20mA	1000hrs.	22pcs	0/1
7	High Temperature /High Humidity	85°C/R,H80%	1000hrs.	22pcs	0/1



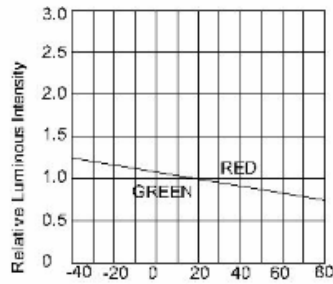
Ambient Temperature T A(°C)
Forward current Derating Curve



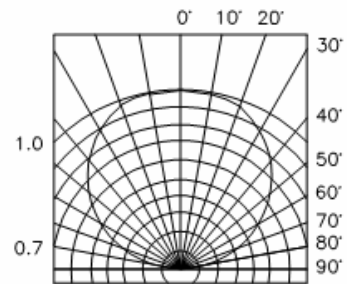
IF-Forward Current (mA)
Luminous Intensity vs. Forward Current



Forward Voltage (V)
Forward Current VS. Forward Voltage



Ambient Temperature Ta(°C)
Luminous Intensity Ambient Temperature

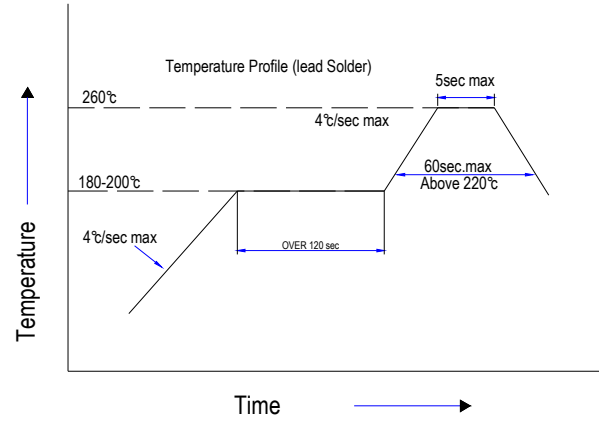
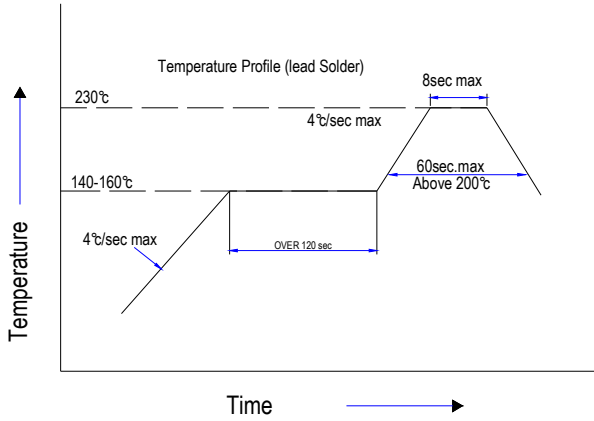


SPATIAL DISTRIBUTION

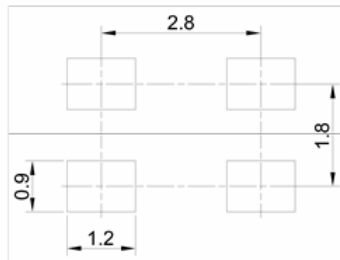
SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling

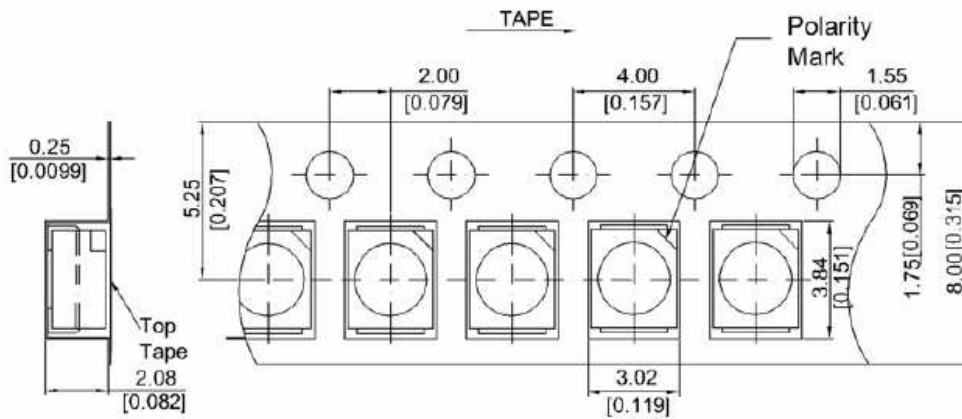
Process to normal temperature is required between first and second soldering process



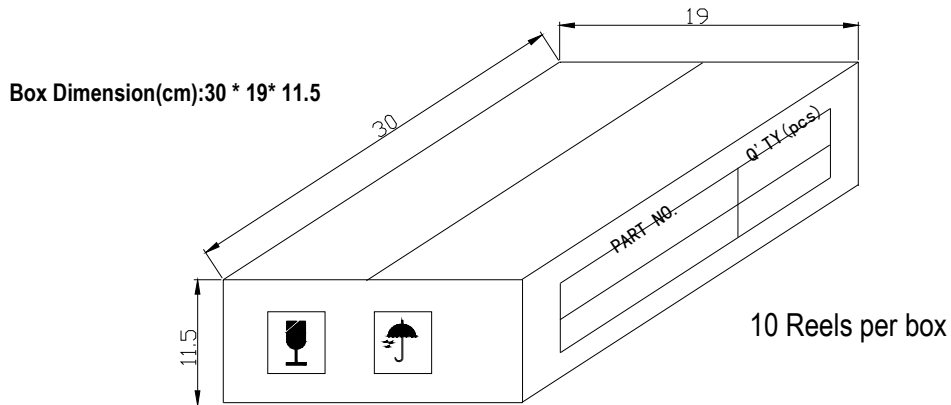
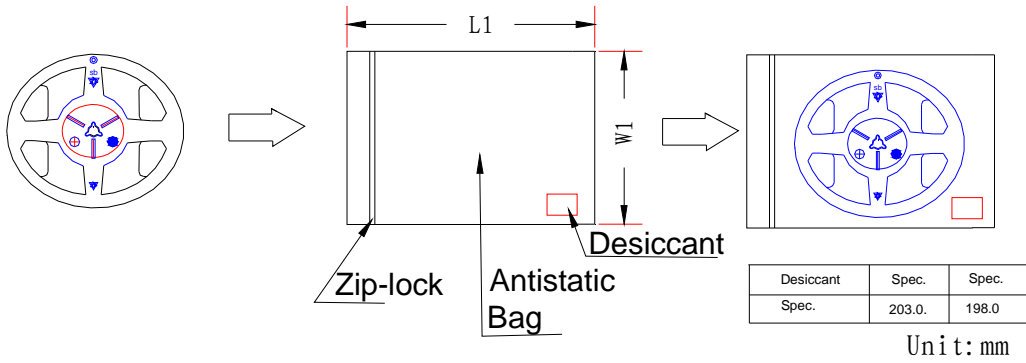
Recommended Soldering Pattern(Units:mm)



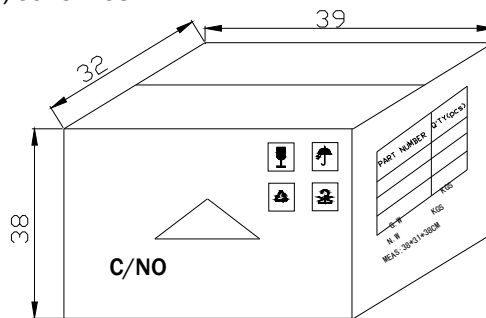
Tape Specifications (Units : mm)



◆ Packing and Shipping Spec.



CARTON
Dimension(cm): 39 * 32 * 38



6boxes/carton
0603B/0603/0805:
4000pcs*10Reels*6boxes*

0805B/1206B/1206/
1210/1204:
3000pcs*10Reels*6boxes*

3528:2000pcs*10Reels*6boxes
5050:1000pcs*8Reels*6boxes



SMD