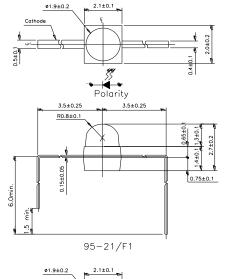
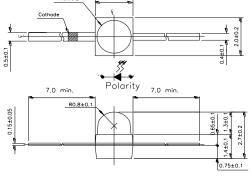


<u>95-21SYGC/S530-XX/XXX</u>

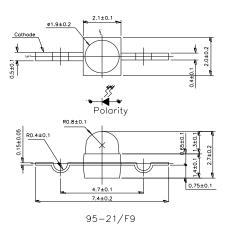
Package Outline Dimensions

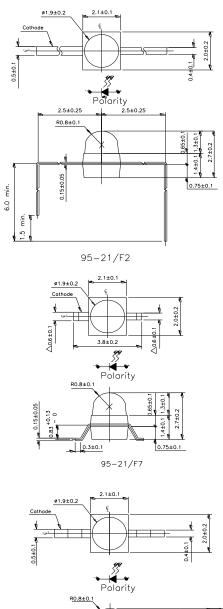
95-21Series

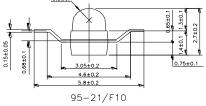












Note: The tolerances unless mentioned is ± 0.1 mm , Unit = mm

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<u>95-21SYGC/S530-XX/XXX</u>

Absolute Maximum Ratings (Ta=25°C)

Absolute Maximum Katings (1a=25 C)						
Parameter	Symbol	Rating	Unit			
Reverse Voltage	VR	5	V			
Forward Current	IF	25	mA			
Peak Forward Current (Duty 1/10 @ 1KHz)	IFP	60	mA			
Power Dissipation	Pd	60	mW			
Electrostatic Discharge(HBM)	ESD	2000	V			
Operating Temperature	Topr	-40 ~ +85	°C			
Storage Temperature	Tstg	-40 ~ +100	°C			
Soldering Temperature	Tsol	Reflow Soldering : 260 $^{\circ}$ C for 10 sec. Hand Soldering : 350 $^{\circ}$ C for 3 sec.				

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Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Chip Rank	MIN.	TYP.	MAX.	Unit	Condition	
Luminous Intensity	Iv	E1		12		mcd	IF=2mA	
		E2		20		mcd	16–2111A	
		E1	132	198		mcd		
		E2	264	330		mcd	IF=20mA	
		E3	400	630		mcd		
Viewing Angle	2 0 1/2			25		deg		
Peak Wavelength	λp			575		nm		
Dominant Wavelength	λd			573		nm		
Spectrum Radiation Bandwidth	$\triangle \lambda$			20		nm		
Forward Voltage	VF		1.7	2.0	2.4	V		
Reverse Current	IR				10	μA	VR=5V	

*95-21SYGC/S530-<u>XX</u> / <u>XXX</u> 1 2

1:Chip Rank

2:Packing Method:

(1) None,F1,F2, F7,F9,F10 : Bulk

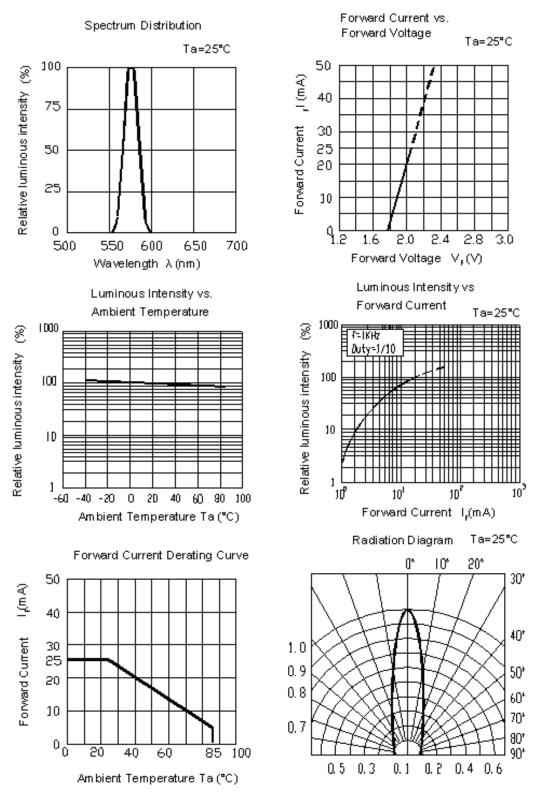
(2) TR7, TR9, TR10 : Taping

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Typical Electro-Optical Characteristics Curves



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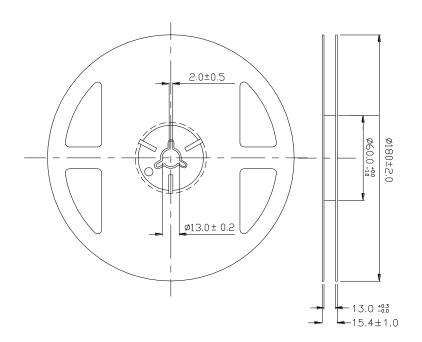
<u>95-21SYGC/S530-XX/XXX</u>

Label explanation

- **CAT: Luminous Intensity Rank**
- HUE: Dom. Wavelength Rank
- **REF:** Forward Voltage Rank



Reel & Carrier Tape Dimensions



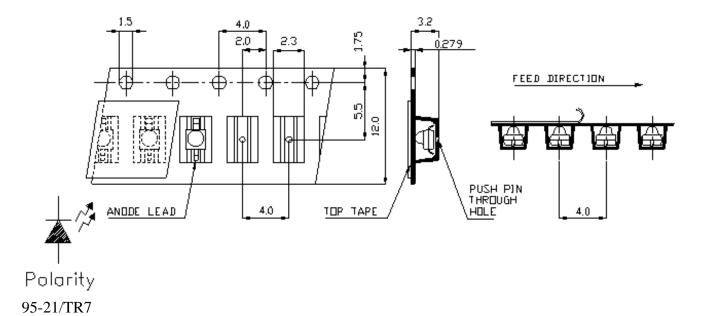
Note: Tolerances Unless Dimension is ± 0.1 mm, Unit = mm

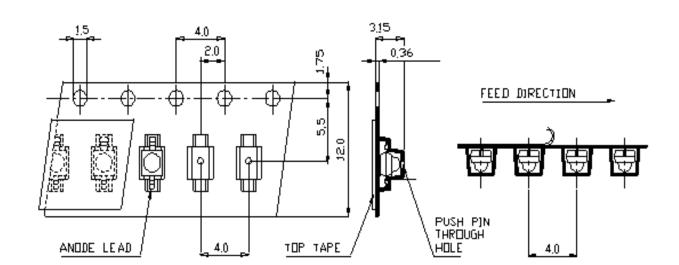
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95-21SYGC/S530-XX/XXX

Loaded quantity 1000 PCS per reel





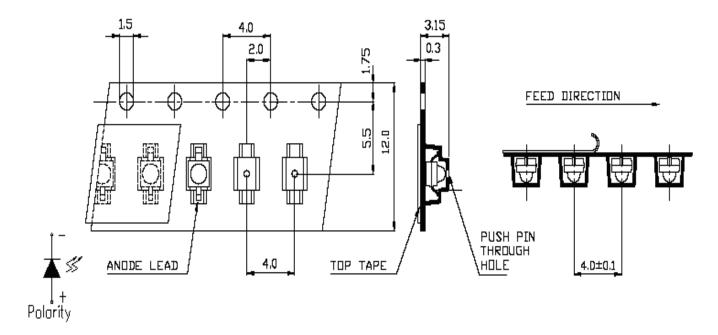
^{95-21/}TR9

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95-21SURC/S530-XX/XXX

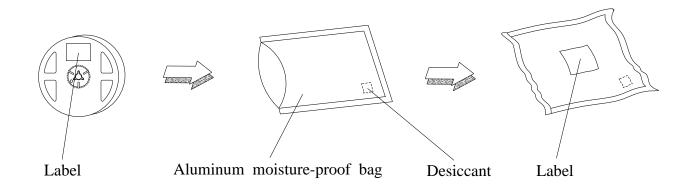
Loaded quantity 1000 PCS per reel



95-21/TR10

Note: The tolerances unless mentioned is ± 0.1 mm , Unit = mm

Moisture Resistant Packaging



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95-21SYGC/S530-XX/XXX

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/Re
1	Reflow Soldering	Temp. : 260°C±5°C Min. 5 sec.	6 Min.	22 Pcs.	0/1
2	Temperature Cycle	H: +100°C 15 min. $\int 5 \text{ min.}$ L: -40°C 15 min.	300 Cycles	22 Pcs.	0/1
3	Thermal Shock	H: +100°C 5 min. $\int 10 \sec.$ L: -10°C 5 min.	300 Cycles	22 Pcs.	0/1
4	High Temperature Storage	Temp. : 100°C	1000 Hrs.	22 Pcs.	0/1
5	Low Temperature Storage	Temp. : -40°C	1000 Hrs.	22 Pcs.	0/1
6	DC Operating Life	IF = 20 mE	1000 Hrs.	22 Pcs.	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 Hrs.	22 Pcs.	0/1

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Precautions For Use

ERLIGH

1. Over-current-proof

Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen).

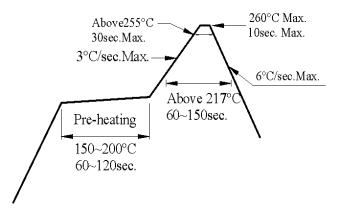
2. Storage

LIGHTING

- 2.1 Do not open moisture proof bag before the products are ready to use.
- 2.2 Before opening the package: The LEDs should be kept at 30° C or less and 90%RH or less.
- 2.3 After opening the package: The LED's floor life is 1 year under 30°C or less and 60% RH or less. If unused LEDs remain, it should be stored in moisture proof packages.
- 2.4 If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the

storage time, baking treatment should be performed using the following conditions.

- 3. Soldering Condition
 - 3.1 Pb-free solder temperature profile



- 3.2 Reflow soldering should not be done more than two times.
- 3.3 When soldering, do not put stress on the LEDs during heating.
- 3.4 After soldering, do not warp the circuit board.



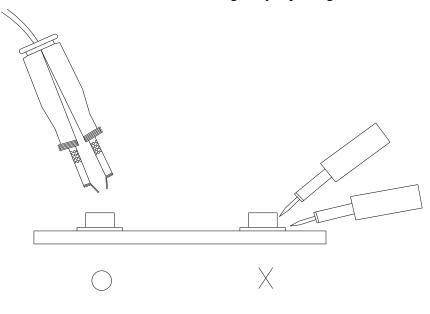
95-21SYGC/S530-XX/XXX

4.Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than 350° C for 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.

5.Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.



EVERLIGHT ELECTRONICS CO., LTD. Office: No 25, Lane 76, Sec 3, Chung Yang Rd, Tucheng, Taipei 236, Taiwan, R.O.C *Tel:* 886-2-2267-2000, 2267-9936 *Fax:* 886-2267-6244, 2267-6189, 2267-6306 *http://www.everlight.com*

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