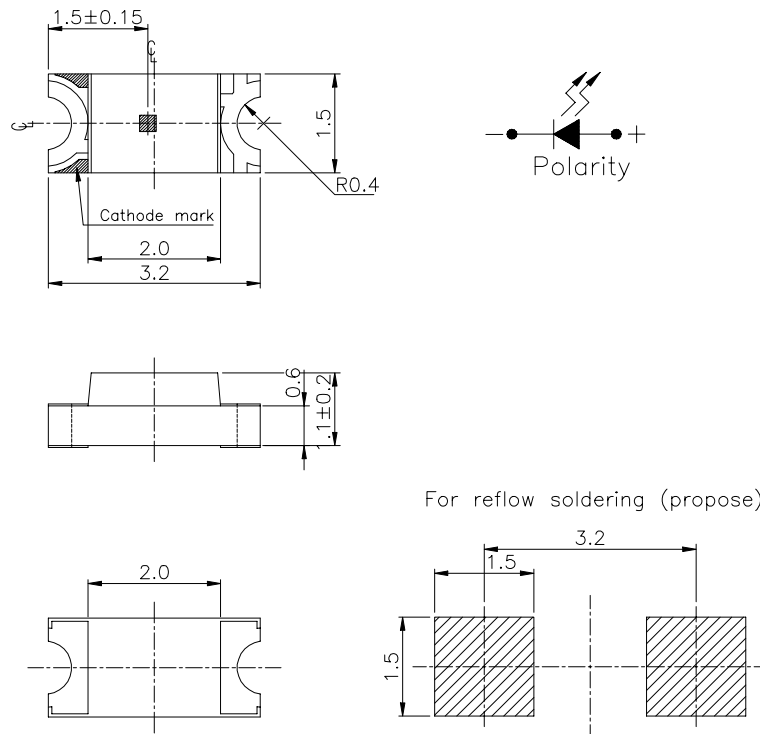


Package Outline Dimensions



Notes: Tolerances Unless Dimension $\pm 0.1\text{mm}$, Angle $\pm 0.5^\circ$,Unit = mm

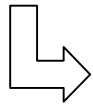
Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	25	mA
Operating Temperature	T_{opr}	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40~ +90	°C
Soldering Temperature	T_{sol}	260 (for 5 second)	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	P_d	60	mW
Peak Forward Current (Duty 1/10 @1KHz)	I_F	160	mA

15-21UYOC/S530-XX/TR8
Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	*Chip Rank	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I _v	A2	15	39	-----	mcd	I _F =20 mA
		A3	36	57	-----		
		A4	51	77	-----		
		A5	62	98	-----		
		A6	77	113	-----		
Viewing Angle	2 θ 1/2		-----	140	-----	deg	I _F =20mA
Peak Wavelength	λ _p		-----	611	-----	nm	I _F =20mA
Dominant Wavelength	λ _d		-----	605	-----	nm	I _F =20mA
Spectrum Radiation Bandwidth	△λ		-----	17	-----	nm	I _F =20mA
Forward Voltage	V _F		-----	2.0	2.4	V	I _F =20mA
Reverse Current	I _R		-----	-----	10	μA	V _R =5V

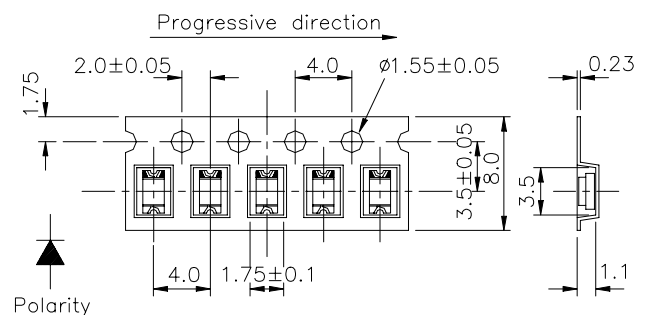
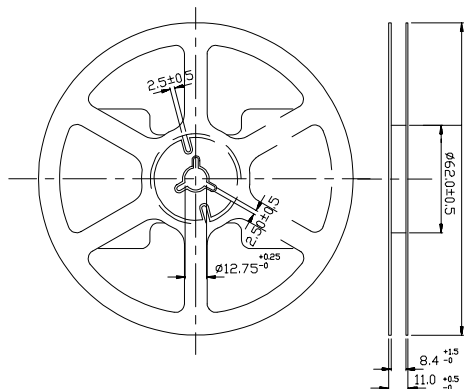
***15-21UYOC/S530-XX/TR8**



Chip Rank

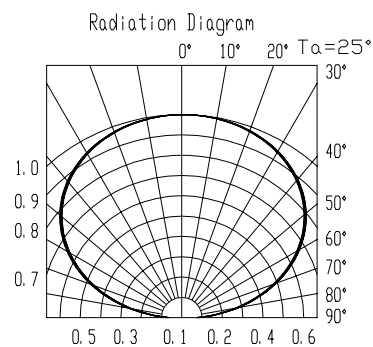
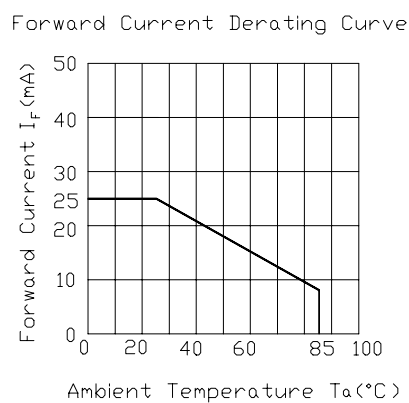
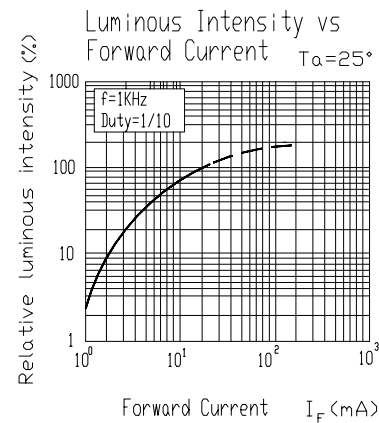
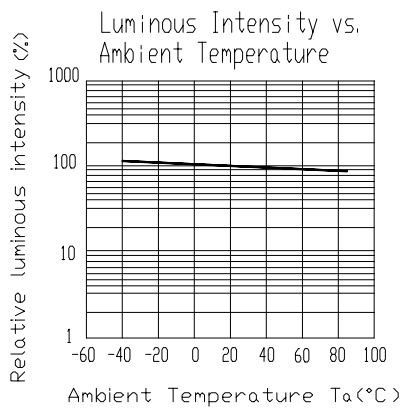
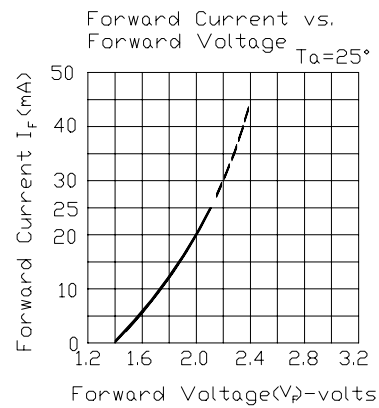
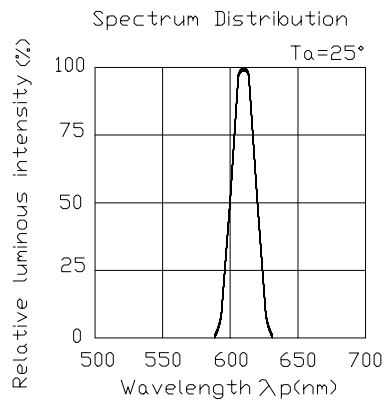
Reel & Carrier Tape Dimensions

Loaded quantity per reel 2000 PCS/reel



Notes: Tolerances Unless Dimension ± 0.1mm , Angle± 0.5° ,Unit = mm

Typical Electro-Optical Characteristics Curves



15-21UYOC/S530-XX/TR8
Reliability Test Items And Conditions

No.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Rc
1	Solder Heat	Temp. : 260°C ± 5°C	5 Sec.	76 PCS.	0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 Cycles	76 PCS.	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 Cycles	76 PCS.	0/1
4	High Temperature Storage	Temp. : 100°C	1000 Hrs.	76 PCS.	0/1
5	Low Temperature Storage	Temp. : -55°C	1000 Hrs.	76 PCS.	0/1
6	DC Operating Life	I _F = 20 mA	1000 Hrs.	76 PCS.	0/1
7	High Temperature / High Humidity	85°C /RH85%	1000 Hrs.	76 PCS.	0/1

Precautions For Use

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 time

2.1 The operation of Temperature and RH are : $5^{\circ}\text{C}\sim 35^{\circ}\text{C}$, RH60%.

2.2 Once the package is opened, the products should be used within a week.

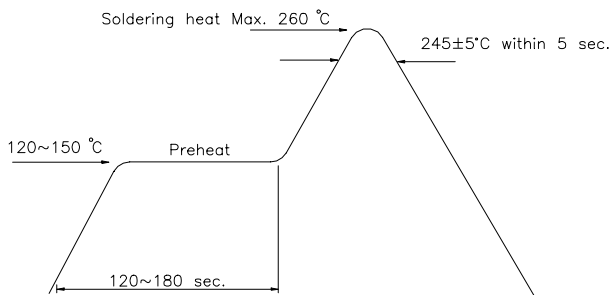
Otherwise, they should be kept in a damp proof box with descanting agent.

Considering the tape life , we suggest our customers to use our products within a year(from production date).

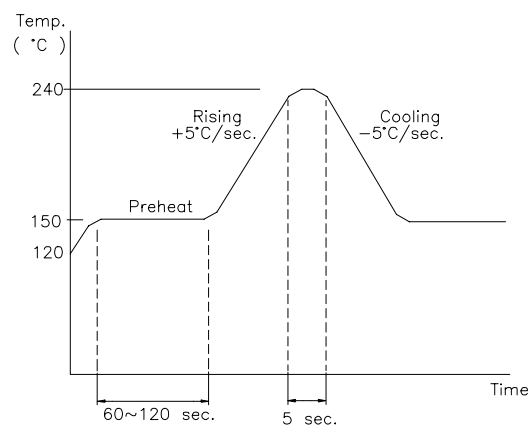
2.3 If opened more than one week in an atmosphere $5^{\circ}\text{C}\sim 35^{\circ}\text{C}$, RH 60%, they should be treated at $60^{\circ}\text{C}\pm 5^{\circ}\text{C}$ for 15hrs.

2.4 When you discover that the desiccant in the package has a pink color (Normal = blue) , you should treat them in the same conditions as 2.3.

Soldering heat reliability (DIP)



Reflow Temp / Time

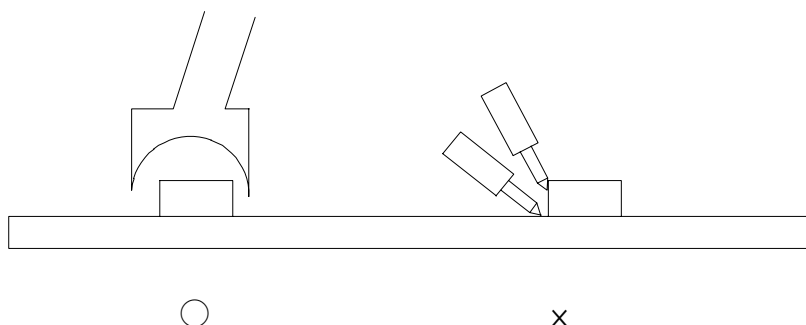


Soldering Iron

Basic spec is ≤ 5 sec when 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1\text{sec}$). Power dissipation of Iron should be smaller than 15 W , and temperature should be controllable. Surface temperature of the device should be under 230°C .

Rework

1. Customer must finish rework within 5 sec under 245°C.
2. The head of iron can not touch copper foil.
3. Twin-head type is preferred.

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