



MODEL NO: 15-22VRVGC/TR8

Device Number : DSE-152-047 REV. 1.0

Chip LEDs with Bi-Color(Multi-Color)

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Features :

- Package in 8mm tape on 7" diameter reel.
- Compatible with automatic placement equipment. 15-22VRVGC/TR8
- Compatible with infrared and vapor phase reflow solder process.
- Multi-color type.

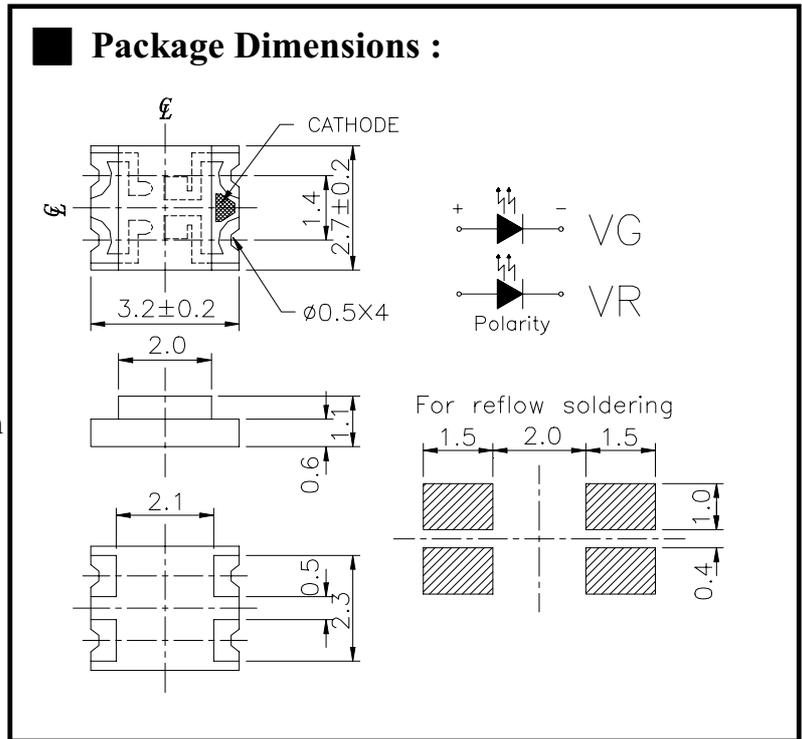
Descriptions :

- The 15-22 SMD Taping is much smaller than leaded components, thus enable smaller board size, higher packing density, reduced storage space and finally smaller equipment to be obtained.
- Besides, lightweight makes them ideal for miniature application, etc.

Applications :

- Automotive: backlighting in dashboard and switch.
- Telecommunication: indicator and backlighting in telephone and fax.
- Flat backlight for LCD, switch and symbol.
- General use.

Package Dimensions :



Notes :

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

PART NO	CHIP		Lens Color
	Material	Emitted Color	
15-22VRVGC/TR8	GaAsP/GaP	Hi-Eff Red	Water Clear
	GaP	Green	

Office: NO. 25, Lane 76, Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.

TEL: 886-2-2267-2000, 2267-9936

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http://www.everlight.com



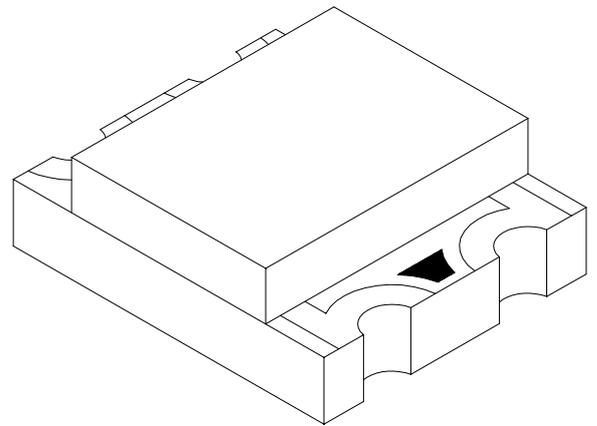
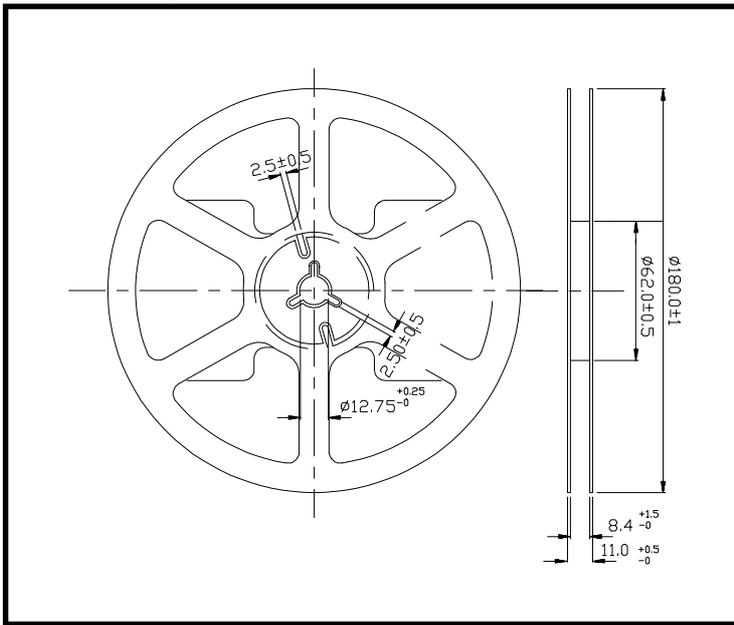
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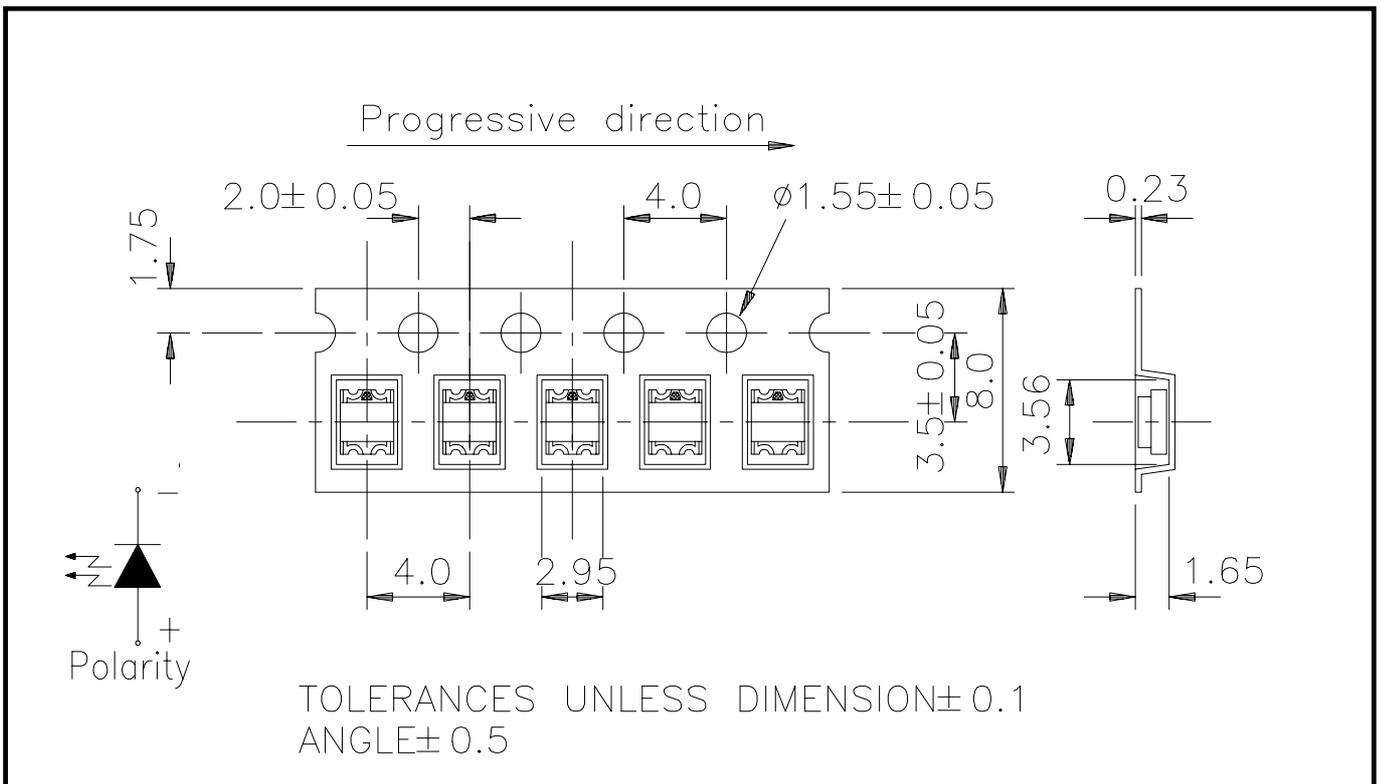
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■ Package Dimensions :



■ Loaded quantity per reel 2000 pcs/reel :





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■ **Absolute Maximum Ratings at Ta = 25°C :**

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	VR: 30 VG: 30	mA
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +90	°C
Soldering Temperature	Tsol	260 (for 5 second)	°C
Power Dissipation	Pd	VR: 100 VG: 100	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	VR: 160 VG: 160	mA

■ **Reliability Test Item And Condition :**

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
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 CYCLE	76 Pcs	0/1
3	Thermal Shock	H : +100°C 5min ∩ 10 sec L : -10°C 5min	50 CYCLE	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	If = 20 mA	1000 HRS	76 Pcs	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 Pcs	0/1



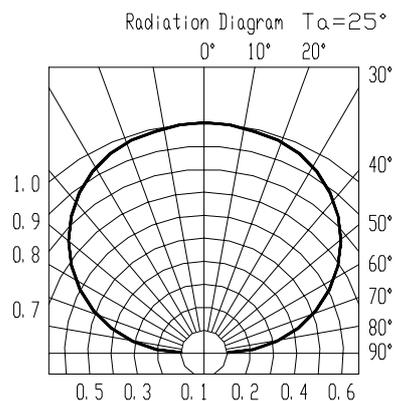
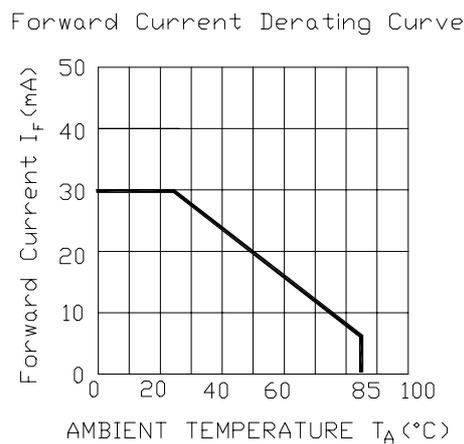
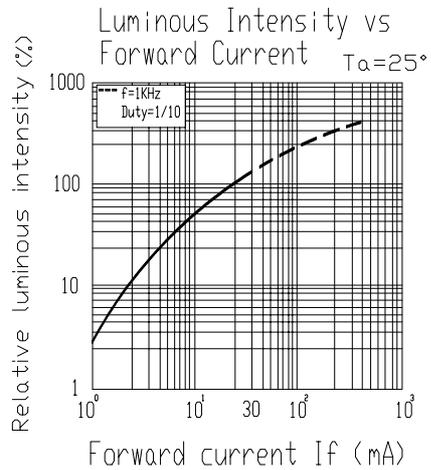
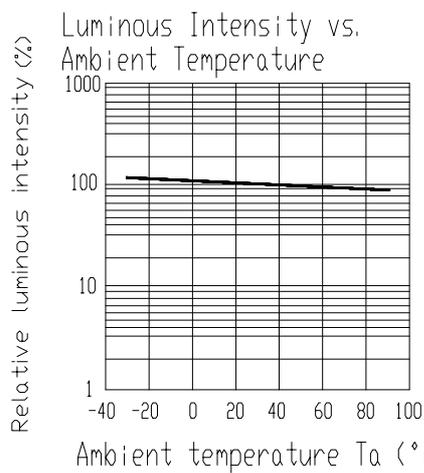
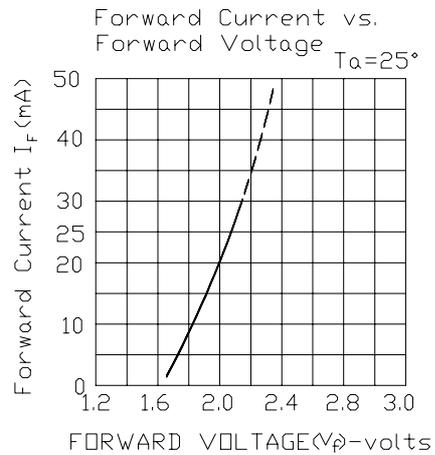
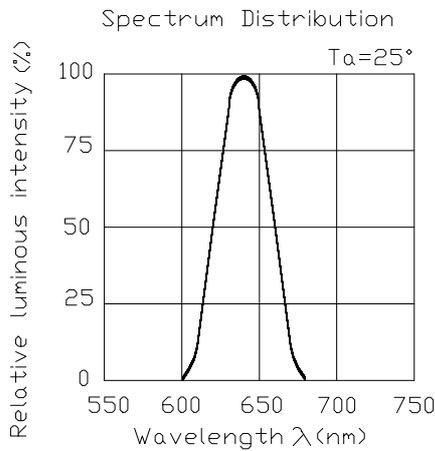
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■ **Typical Electro-Optical Characteristic Curves :**

VR





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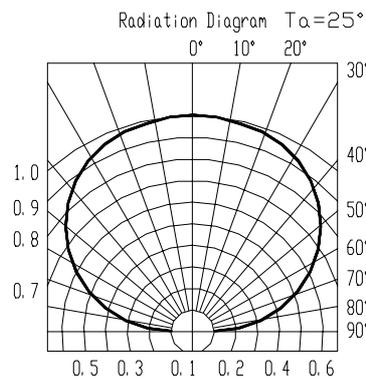
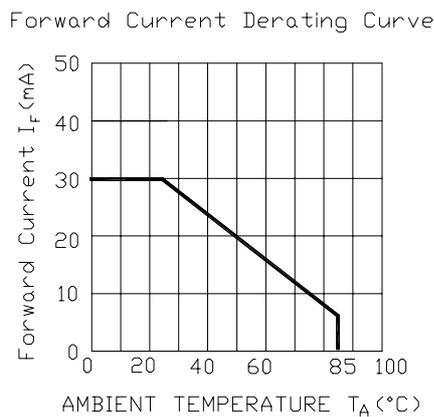
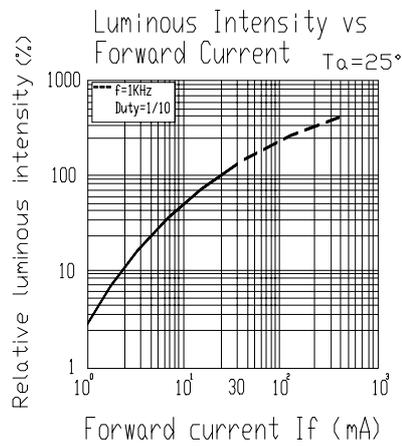
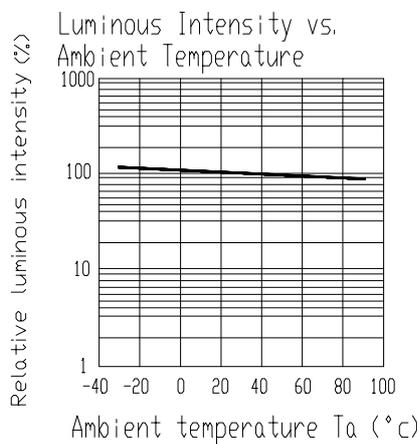
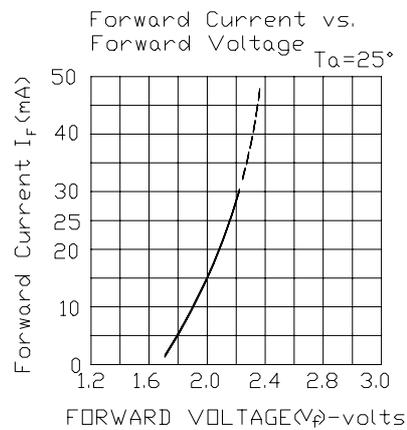
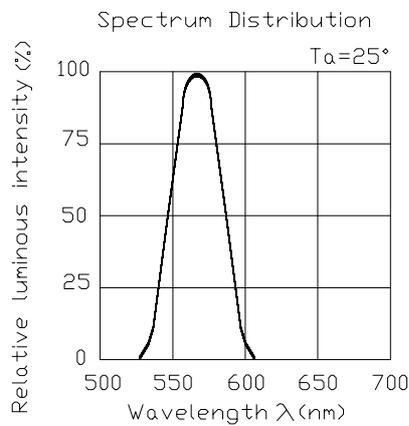
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■ **Typical Electro-Optical Characteristic Curves :**

VG





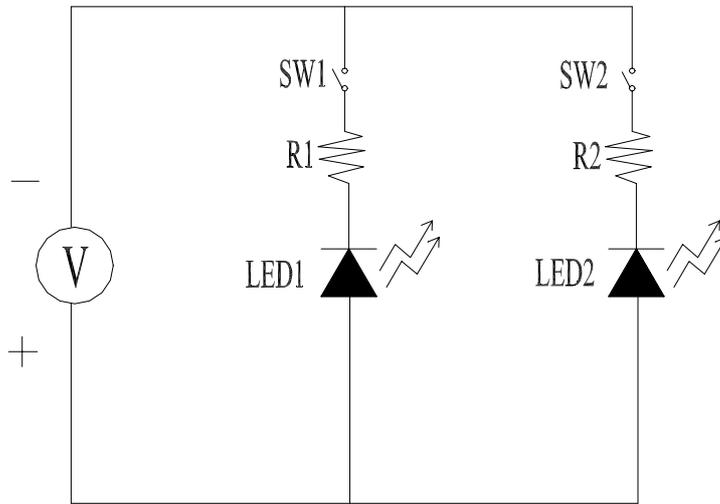
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■ **Test Circuit :**



■ **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 R.H. are : $5^{\circ}\text{C} \sim 35^{\circ}\text{C}$, R.H.60%.

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

Otherwise, they should be keeping in a dampproof box with desiccants.

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

2.3 If opened more than one week in an atmosphere $5^{\circ}\text{C} \sim 35^{\circ}\text{C}$, R.H.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.



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■ Reflow Temp / Time :

