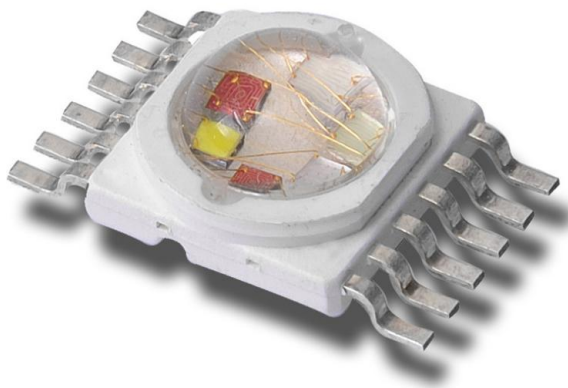


PRODUCT SPECIFICATION



Part No. : SN-18ZRGBWZYV14G45-E6A-MA

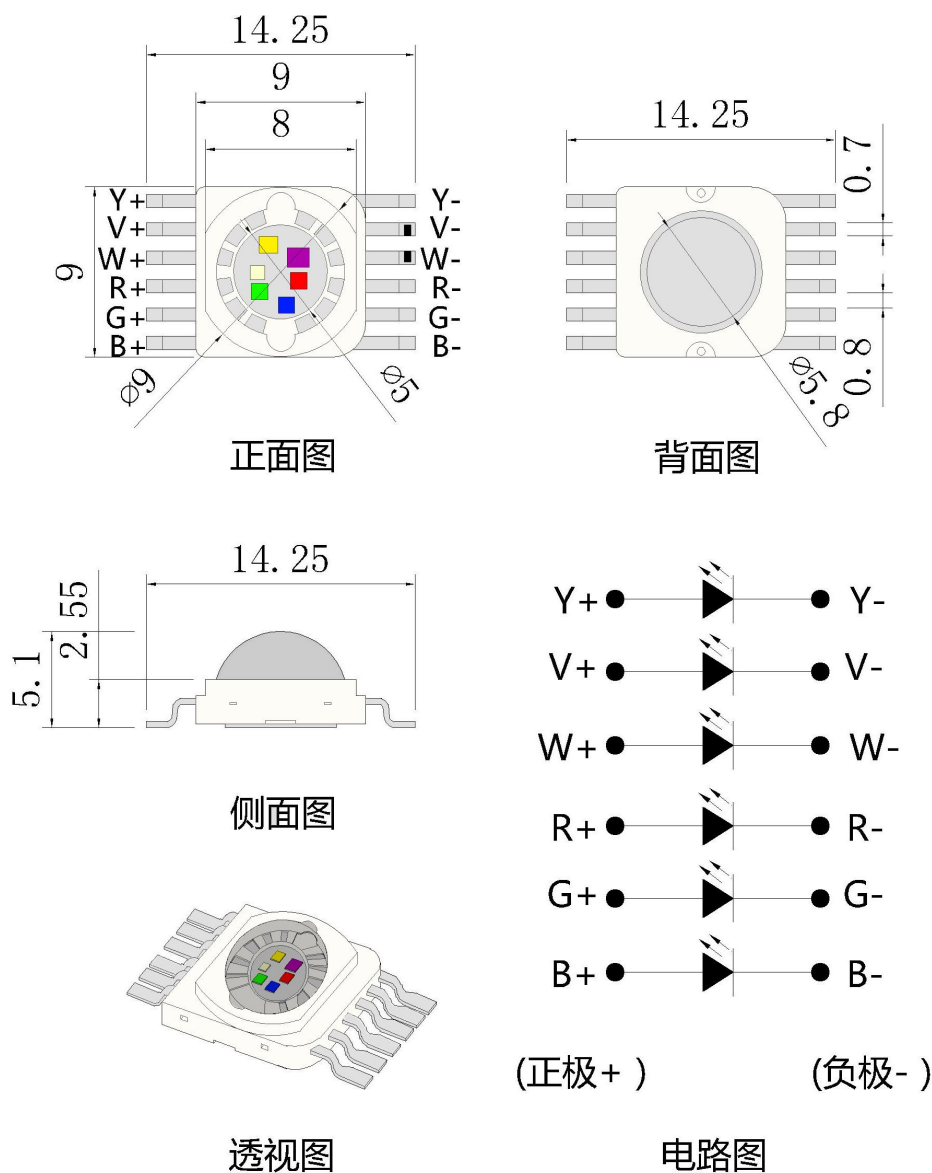
Catalog

1.Product Features	P2
2.Dimensions	P2
3.Absolute Maximum Rating	P3
4.Optical Character	P3
5.Optical Character Curves	P4
6.Spectrum Curves	P5
7.Viewing Angle Curves	P5
8.Tape&Reel Packing	P6
9.Soldering Advice	P7
10.Cautions	P8

1.Product Features

- High Brightness RGBWYV LED
- Chip Material: InGaN AlGaInP
- Round Package
- RoHS Compliant
- Viewing Angle 140 Degree
- Transparent Silicone

2.Dimensions



Notes:

1. All dimensions are in millimeters.
2. Tolerance is $\pm 0.1\text{mm}$ unless otherwise noted.

3.Absolute Maximum Rating @ Ta=25° C

Parameter	Symbol	Maximum Rating	Unit
Continuous Forward Current	IF	700	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFp	1000	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	18	W
Electrostatic Discharge	ESD	1000	V
Operating Temperature Range	TOPR	-25°C to +80°C	
Storage Temperature Range	TSTG	-35°C to +100°C	
Lead Soldering Temperature	TSOL	260°C	

4.Optical Character @ Ta=25° C

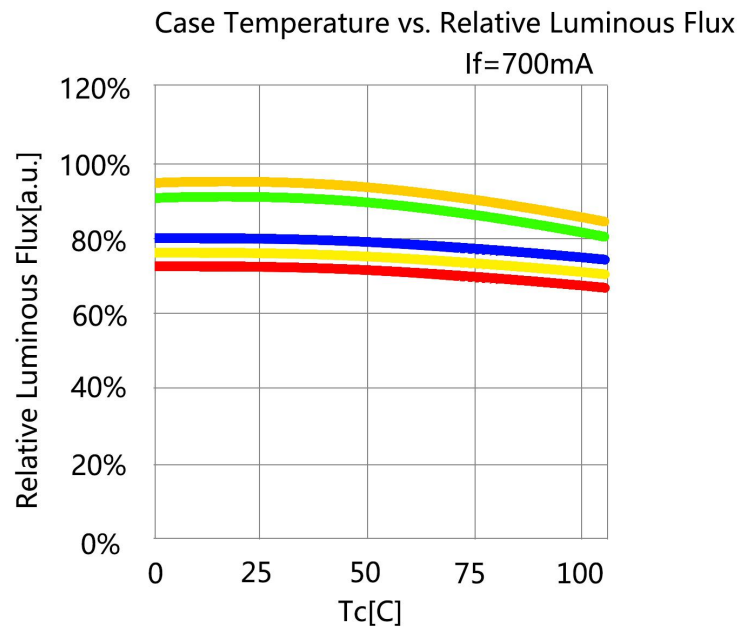
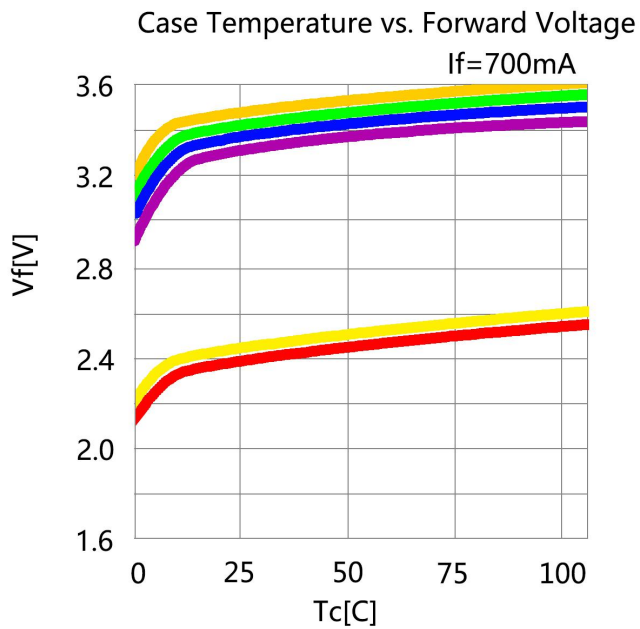
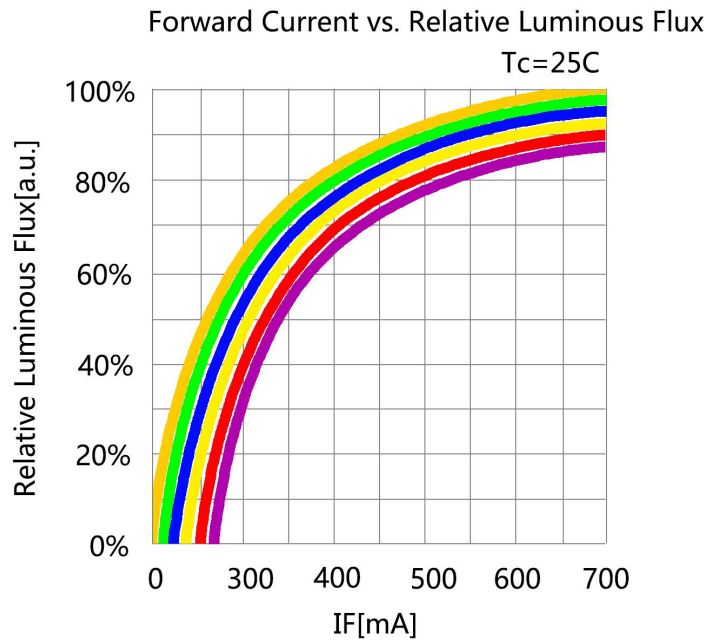
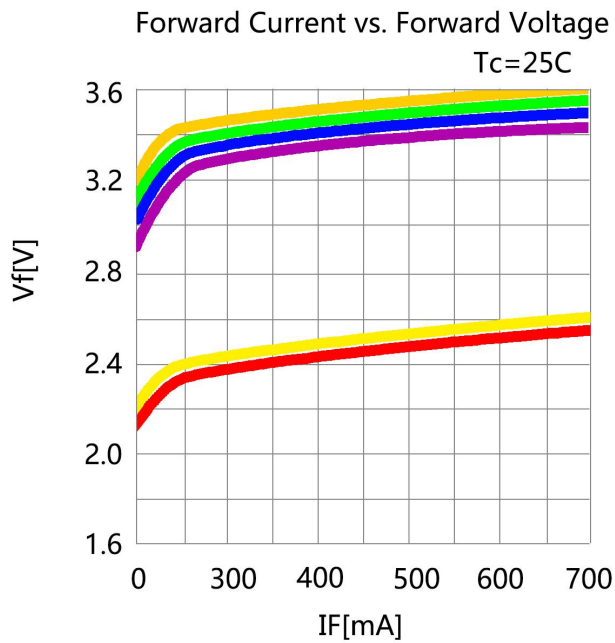
Parameter	Symbo	Color	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	VF	G/V	3.2	3.4	3.6	V	IF=700mA
		B/ W	3.2	3.4	3.6	V	IF=700mA
		R/Y	2.2	2.3	2.4	V	IF=700mA
Luminous Flux	Φ	G/V	160/10	170/15	180/20	Lm	IF=700mA
		B /W	40/250	50/260	60/270	Lm	IF=700mA
		R/Y	100/90	105/95	110/100	Lm	IF=700mA
Dominant Wavelength	Wld	G/V	520/425	522.5/427	525/430	nm	IF=700mA
		B	460	462.5	465	nm	IF=700mA
		R/Y	620/590	622.5/593	625/595	nm	IF=700mA
Colour temperature	Tc	W	6000	7000	8000	K	IF=700mA
Reverse Current	IR				10	μA	VR=5V
Viewing Angle	2θ1/2				140	deg	IF=700mA
Recommend Forward Current	IF(rec)	RGBWYV			700	mA	

Notes:

Measurement tolerance of forward voltage±0.1V

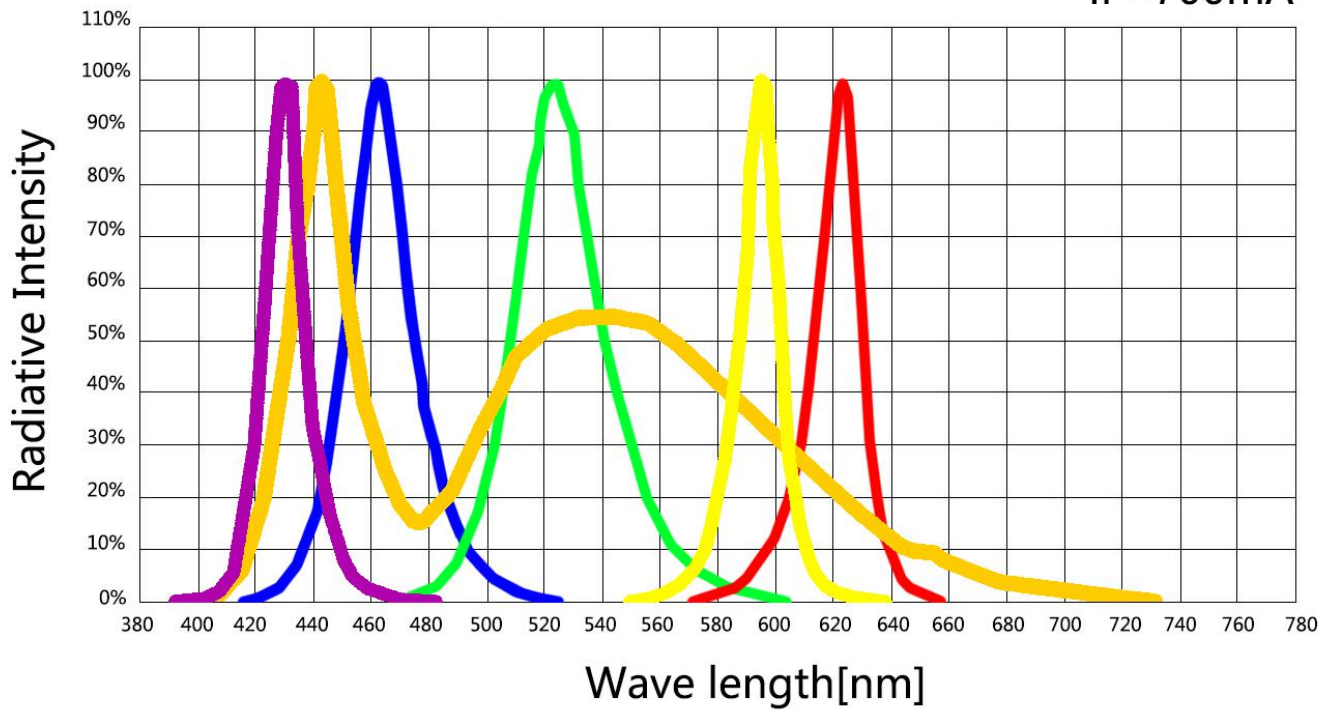
5. Optical Character Curves

(25 ° Ambient Temperature Unless Otherwise Noted)



6. Spectrum Curves

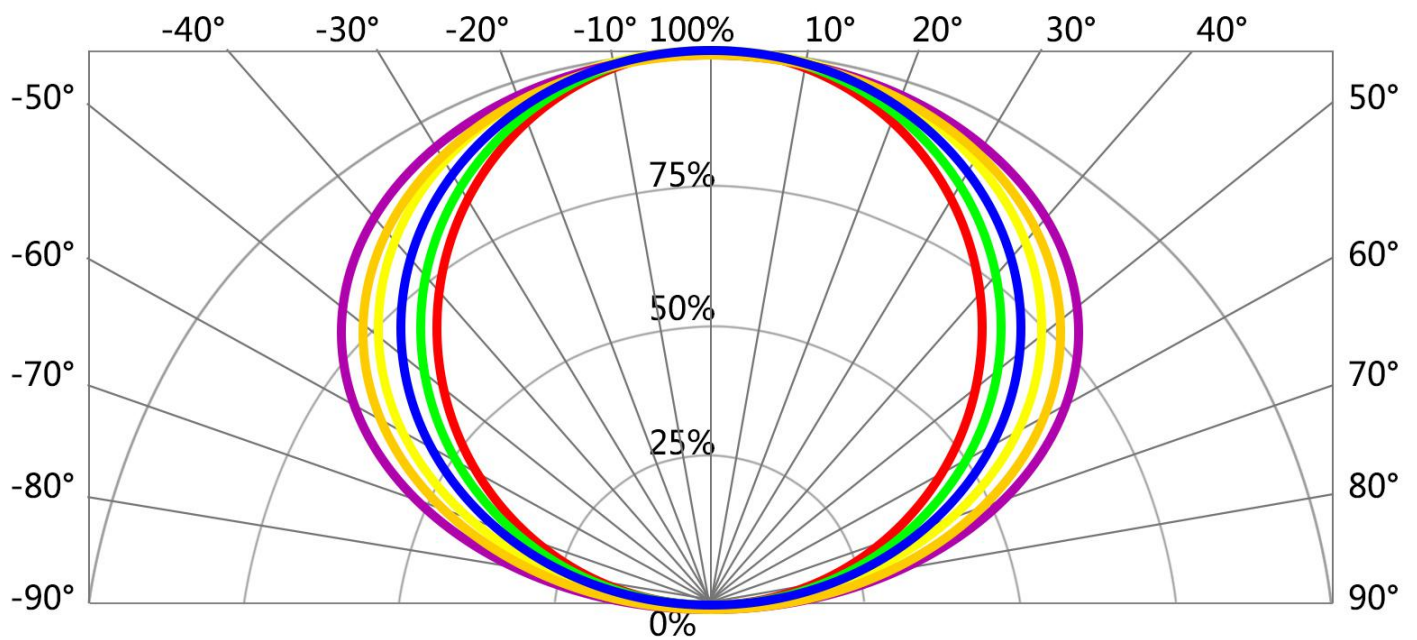
IF=700mA



7. Viewing Angle Curves

Radiation Characteristic

IF=700mA



8.Tape&Reel Packing

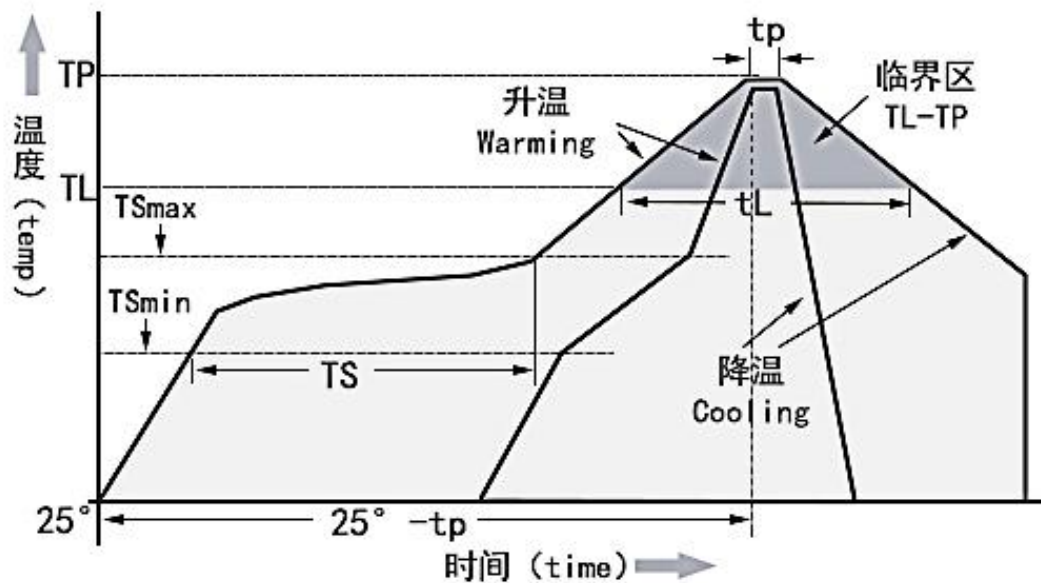
1. Recommend unpacked LED beads be welded within one day,if not,please vacuumize again and store in an environment of 20-35°C and 30-60% humidity. If can't vacuumize,please store LED beads in moisture proof box,control at $25^{\circ}\text{C}\pm 3^{\circ}\text{C}$, humidity 50-60%.If unpacked above 1week,bake at $60\pm 5^{\circ}\text{C}$ for 10-12 hours before weld.

Notes:

1. QTY: 1000pcs/Reel
2. Tolerance $\pm 0.2\text{mm}$.
3. Package: P/N

9.Soldering Advice

1. When soldering,don't touch the LED appearance gel during,this bad operation will destroy the LED.Moding LED usually use reflow soldering, please refer to the following reflow temperature curve , and recommend the user follow the soldering temperature curve of the solder paste.



Temperature Curve Character	Lead-free solder
Average heating rate(TSmin to Tp)	最高 3°C/秒 Top 3 °C / s
Preheating: Minimum temperature (TSmin)	90°C
Preheating: Maximum temperature (TSmax)	200°C
Preheating: Time (TSmin to TSmax)	60-180 s
Duration above temperature: Temperature TL	240°C
Duration above temperature: Time tL	60-150 s
Peak/classification temperature (Tp)	260°C
Time within 5°C of actual peak temperature (tp)	20-40 s
Cooling speed	最高 6°C/秒 The highest 6 °C / s
Time to reach peak temperature at 25°C	最多 8 分钟 8 minutes Max

10.Cautions

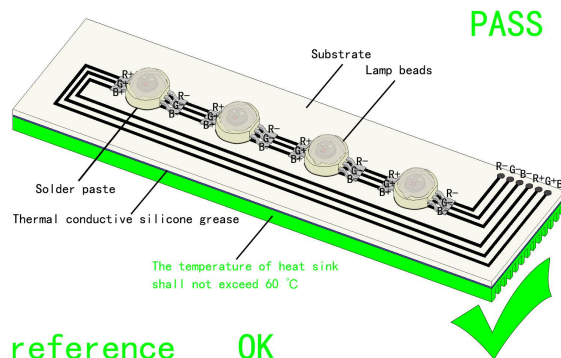
1. Electrostatic Treatment

Do a full range of anti-static measures (such as: anti-static ring, anti-static clothes, machine, equipment grounding wire, etc.)



2. Heat Dissipation

- A、 It is recommend to configure reasonable heat dissipation device for the product.
- B、 The best working temperature range of the product is 40-60°. It is recommended to control the working temperature of the product within a reasonable range.



3. Installation Conditions

- A、 Do not exert any pressure on the LED area during the use of the led beads. If the machine is used to take materials, select a suction nozzle of reasonable size,such as below:

