

TX-5060RBGL40FC120-NUVENG-01B

PRODUCT SPECIFICATION

Features:

- ◆ High luminous output
- ◆ No UV
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆ Red:AlInGaP
- ◆ Green: GaInN
- ◆ Blue:GaInN
- ◆ Lime:GaInN

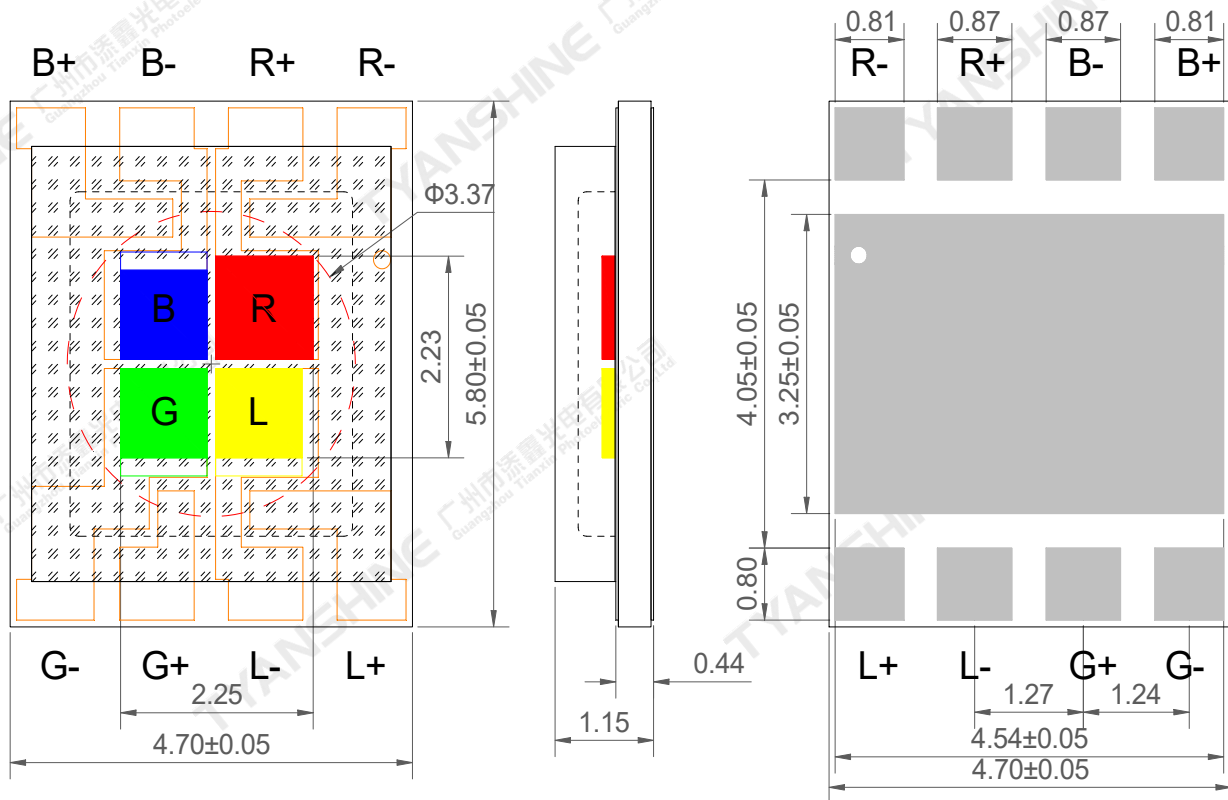
Emitting Color:

- ◆ Red (R)
- ◆ Green (G)
- ◆ Blue (B)
- ◆ Lime (L)

Applications:

- ◆ Auxiliary lighting
- ◆ Ambient lighting
- ◆ Architectural lighting
- ◆ Entertainment lighting

Package Dimensions:



Notes:

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are ±0.1mm .

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Max Ratings	Unit
Forward Current	R	2.5	A
	B	3.0	
	G	3.0	
	L	2.2	
Reverse Voltage	V _R	5	V
Power Dissipation	R	6.5	W
	B	10.2	
	G	10.2	
	L	8.3	
Junction Temperature	R	115	°C
	B	150	
	G	150	
	L	150	
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Storage Temperature(Only for LED, not including packaging)	T _{stg}	-40~+85	°C
Operation Temperature	T _{opr}	-40~+85	

Notes:

- Specifications are subject to change without notice.
- The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.
- Precautions for ESD:
STATIC SHIELD Electricity and surge damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

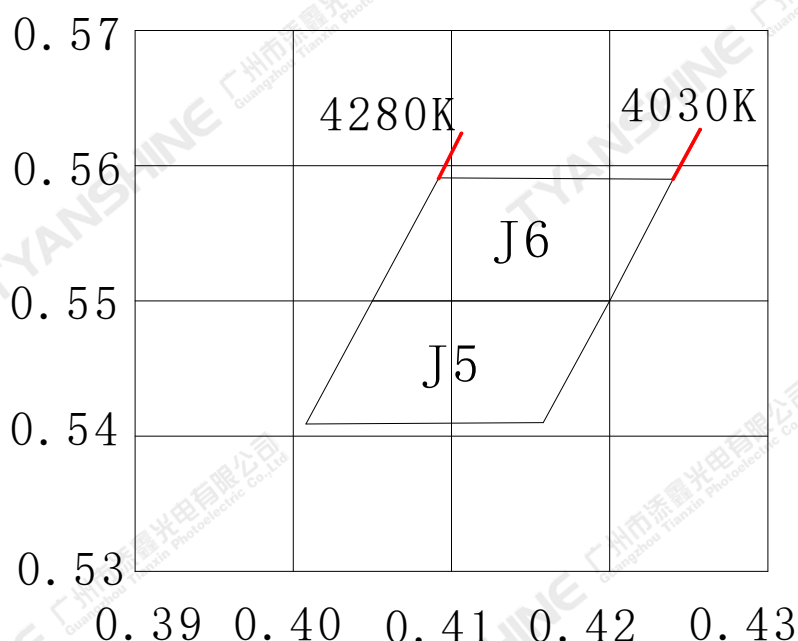
Electrical Optical Characteristics (Tc=25°C)

Parameter	Symbol	Condition	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	If=1.0A	R	105	120	135	lm
			B	40	45	50	
			G	250	275	300	
			L	310	335	360	
Dominant Wavelength	λ_d		R	618	622	626	nm
			B	450	455	460	
			G	522	527	532	
Peak-emission Wavelength	λ_p		R	625	630	635	nm
			B	445	450	455	
			G	516	521	526	
Spectral Line Half-Width	$\Delta\lambda$		R	13	16	19	nm
			B	15	20	25	
		G	25	30	35		
		L	107	108	109		
Forward Voltage	V_f	R	2.0	2.4	2.8	V	
		B	2.9	3.3	3.8		
		G	2.9	3.3	3.8		
		L	2.9	3.3	3.8		
Correlated Colour Temperature	CCT	L	4030	—	4280	K	
Reverse Current	I_R	$V_R=5V$	R	—	—	2	μA
			B	—	—	2	
			G	—	—	2	
		—	L	Not designed for reverse operation			
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	—	—	0.8	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$	If=1.0A	R	—	-2.3	—	mV/°C
			B	—	-2.5	—	
			G	—	-6	—	
			L	—	-1.9	—	

Notes:

- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance: $\pm 10\%$.
- 4.Forward voltage measurement tolerance: $\pm 0.3V$.
- 5.Ra measurement tolerance: ± 2 .

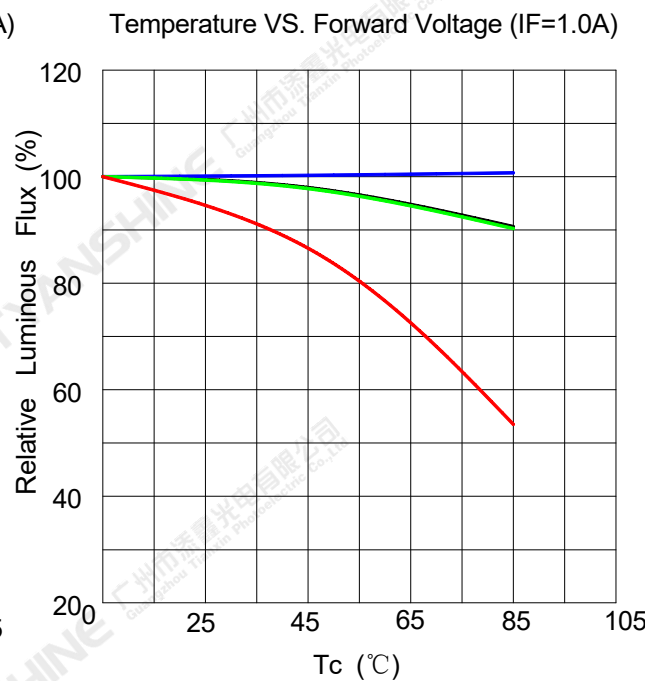
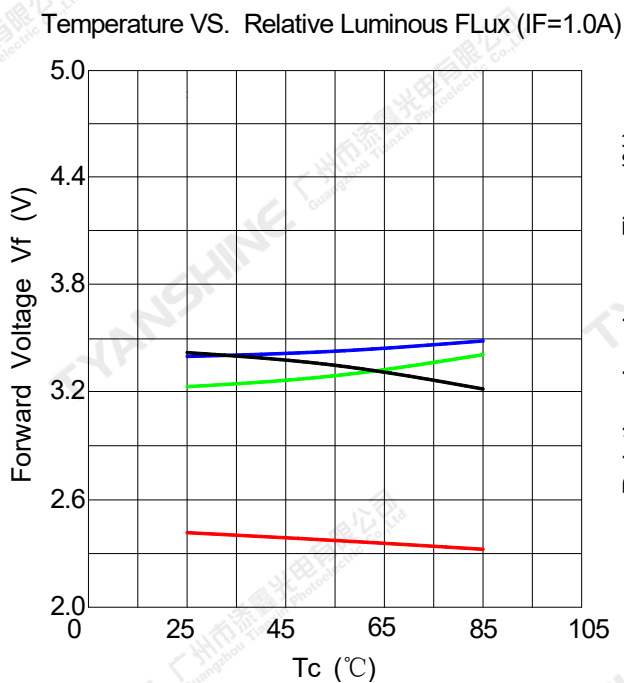
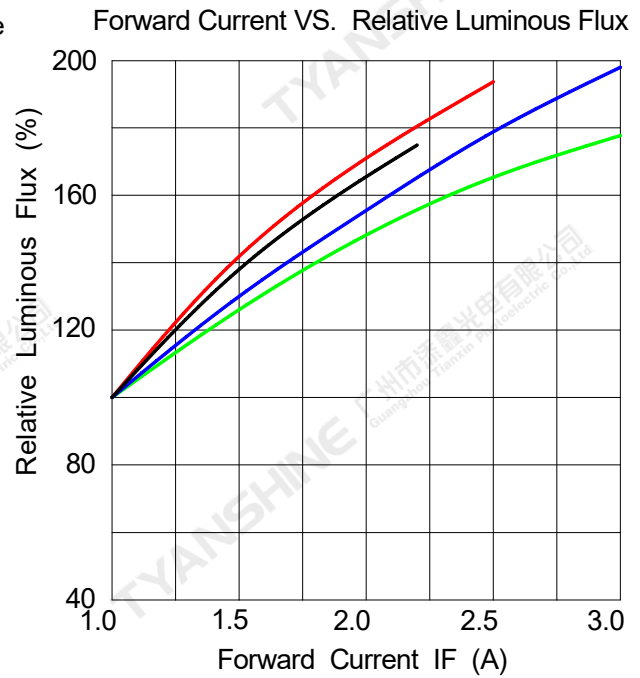
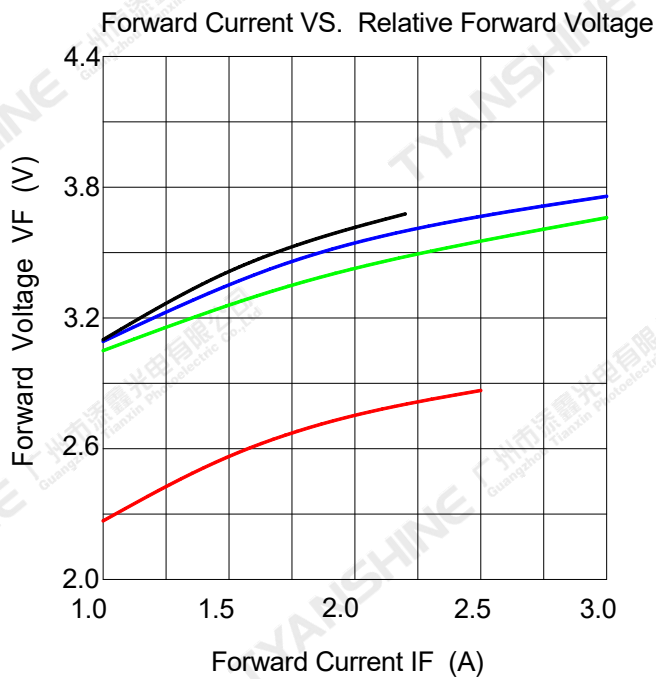
White light Color coordinate filing (IF=1.0A,Tc=25°C)



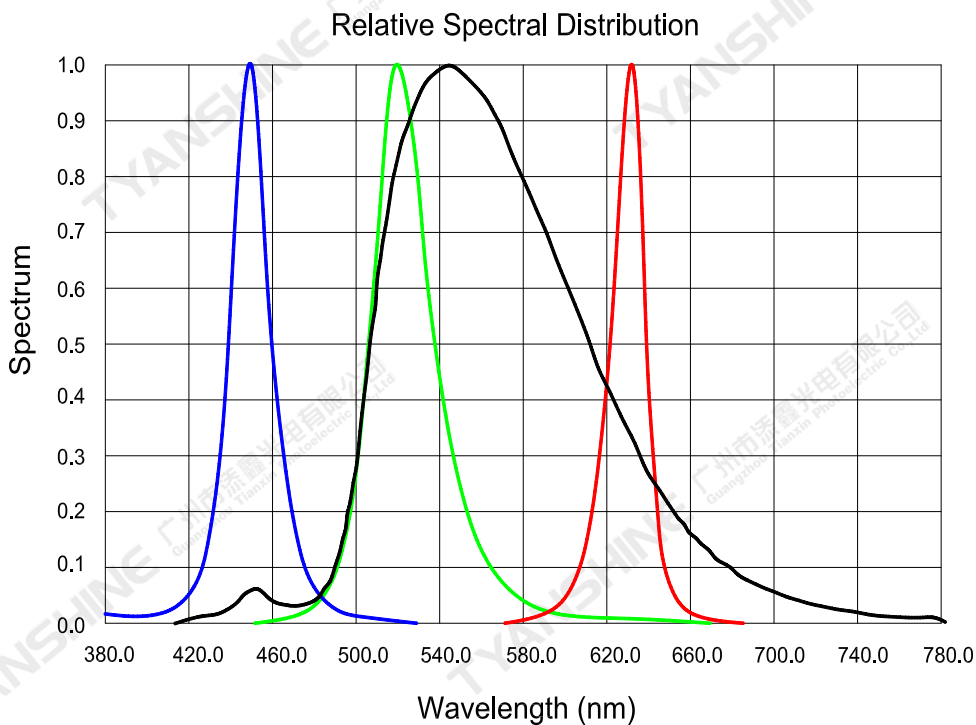
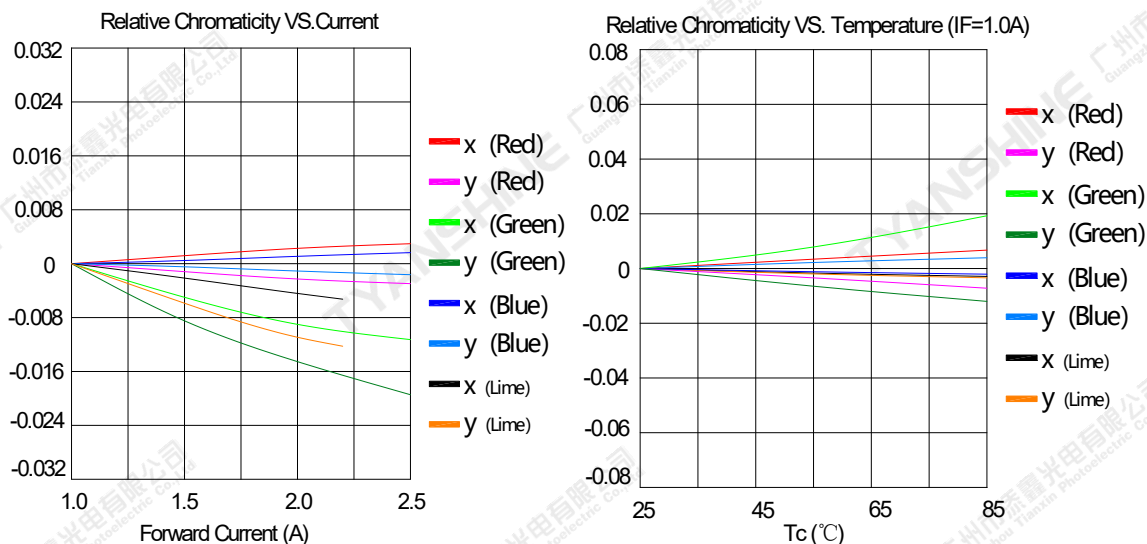
Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
J5	4030K	4280K	0.4158	0.5410	0.4008	0.5409	0.4050	0.5500	0.4200	0.5500
J6	4030K	4280K	0.4092	0.5591	0.4240	0.5590	0.4050	0.5500	0.4200	0.5500

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Notes: ■ Red (R) ; ■ Green (G) ; ■ Blue (B) ; ■ Lime (L) ;



Notes: Red (R) ; Green (G) ; Blue (B) ; Lime (L) ;

Notes:

1. $2\theta_{1/2}$ is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. View angle tolerance is $\pm 5^\circ$.

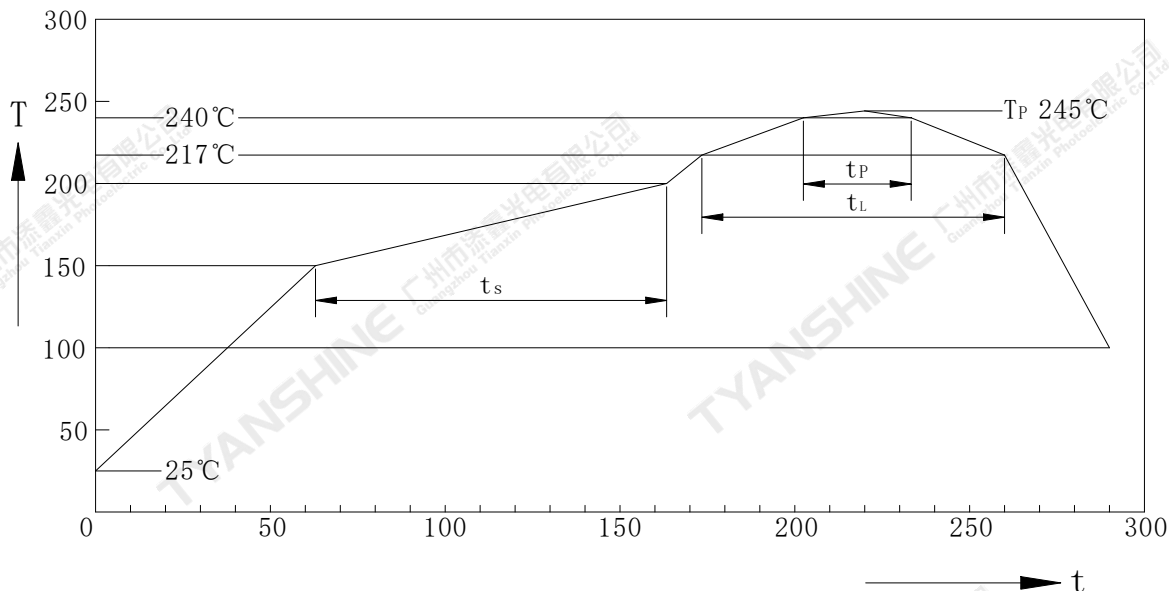
Usage Precautions

Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition



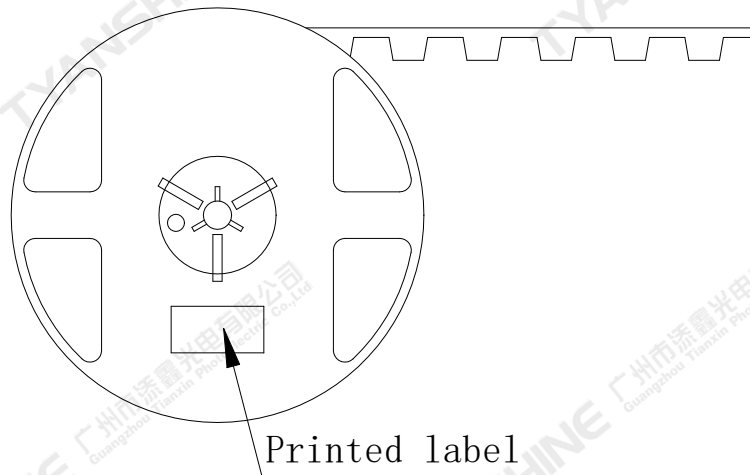
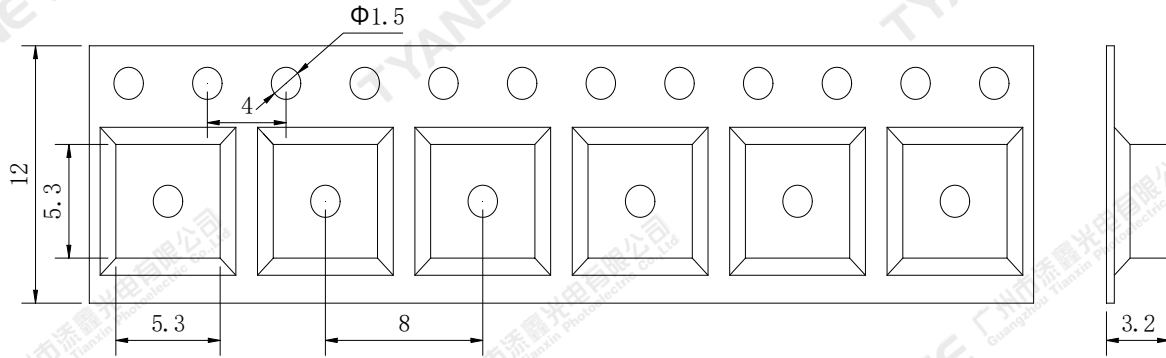
Profil-Charakteristik Profile Feature	Symbol	Pb-Free(SnAgCu)Assembly			Einheit Unit
		Minimum	Recommendation	Maximum	
Ramp-up Rate to Preheat 25°C to 150°C	-	-	2	3	K/s
Time t_s T_{Smin} to T_{Smax}	t_s	60	100	120	s
Ramp-up Rate to Peak T_{Smax} to T_p	-	-	2	3	K/s
Liquidus Temperature	T_L	217			°C
Time above Liquidus temperature	t_L	-	80	100	s
Peak Temperature	T_P	-	245	255	°C
Time within 5°C of the specified peak temperature T_p-5 K	t_p	10	20	30	s
Ramp-down Rate T_p to 100°C	-	-	3	6	K/s
Time 25°C to T_p	-	-	-	480	-

Note:

All temperatures refer to topside of the package, measured on the package body surface.

Dimensions For Cannulation And Packaging

Quantity:1000 PCS



Notes:

1. All dimensions are in millimeters.
2. Tolerances are ± 2.0 mm unless otherwise noted.
3. The products are packaged together with silica gel, Transport, not to the weight of welding LED light-emitting area, As a result of the weight of LED light-emitting zone in the quality of, Irresponsible of the Company.

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