

TX-3125W10FSA2-0G3CD-01

PRODUCT SPECIFICATION (R&D version)

Features:

- ◆ Excellent transiting heat from LED chip operating under 1.6A.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆ GaN

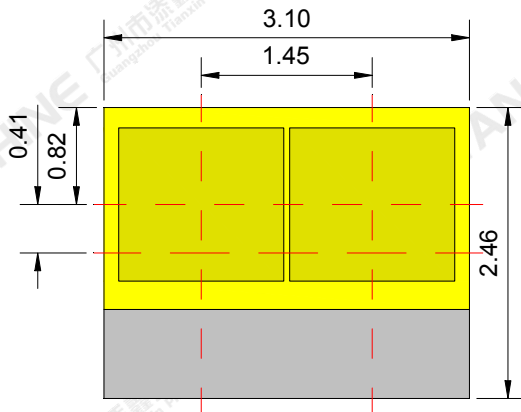
Emitting Color:

- ◆ White

Applications:

- ◆ Auxiliary lighting
- ◆ Architectural lighting
- ◆ General Lighting

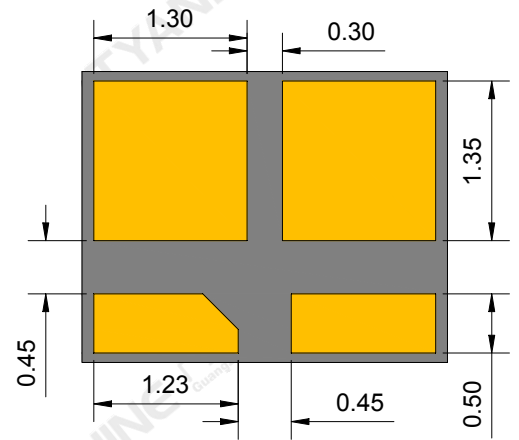
Package Dimensions:



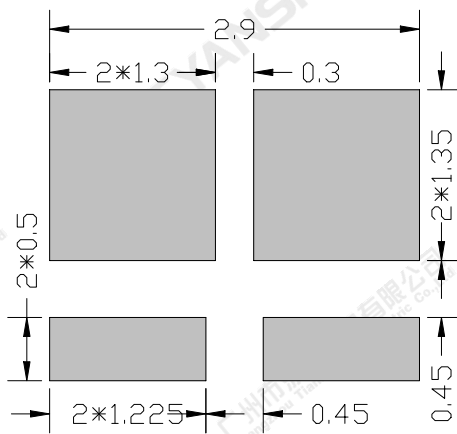
Top view



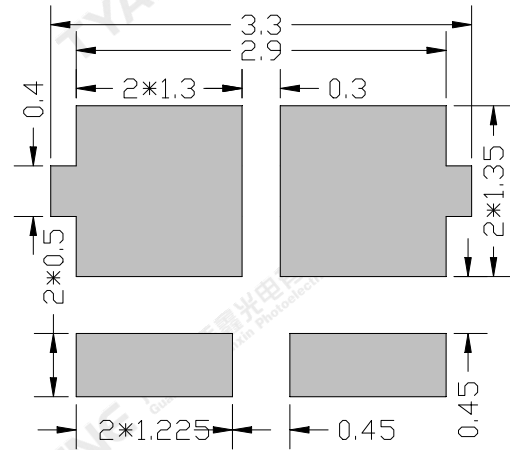
Side view



Bottom view



Recommended solder pad



recommended stencil pattern

Notes:

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are $\pm 0.1\text{mm}$.

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Ratings	Unit
Forward Current	IF	1.6	A
Reverse Voltage	VR	Not designed for reverse operation	V
Power Dissipation	PD	10.08	W
Junction Temperature	Tj	150	°C
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	V
Storage Temperature	Tstg	-40~+70	°C
Operation Temperature	Topr	-30~+125	

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	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	If=1.0A	670	735	800	lm
Forward Voltage	V_f		5.8	6.0	6.3	V
Viewing Angle at 50% IV	$2\theta_{1/2}$		—	120	—	Deg
Correlated Colour Temperature	CCT		6000	6750	7500	K
Reverse Current	I_R	—	—	—	—	μA
Thermal Resistance Junction to Case	$R_{\theta_{J-C}}$	If=1.0A	—	0.95	—	K/W
Temperature Coefficient of Voltage	$V_{\Delta F/T}$		—	-2	—	mV/°C

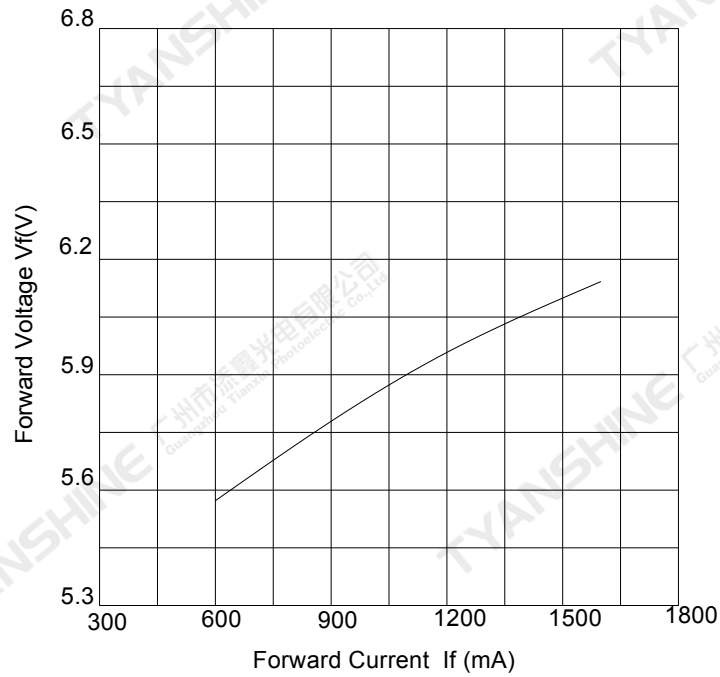
Notes:

- 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:±15%.
- 4.Forward voltage measurement tolerance:±0.15V.

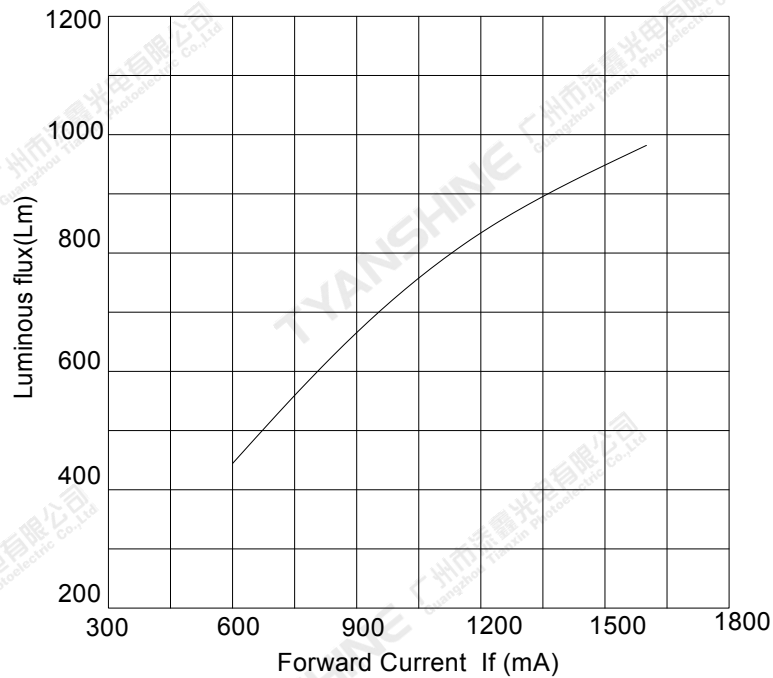
Typical Electrical/Optical Characteristics Curves

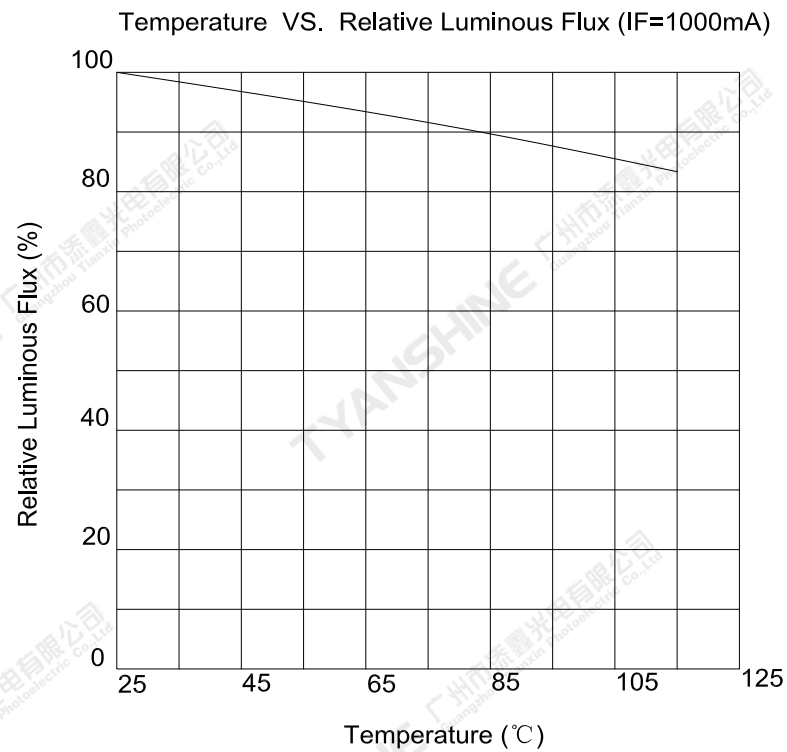
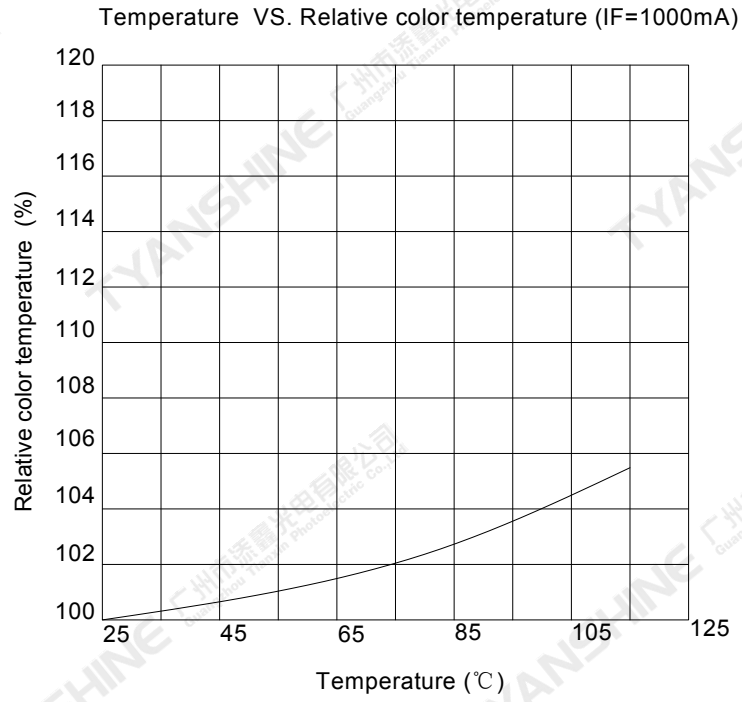
(25°C Ambient Temperature Unless Otherwise Noted)

Forward Current VS. Forward Voltage

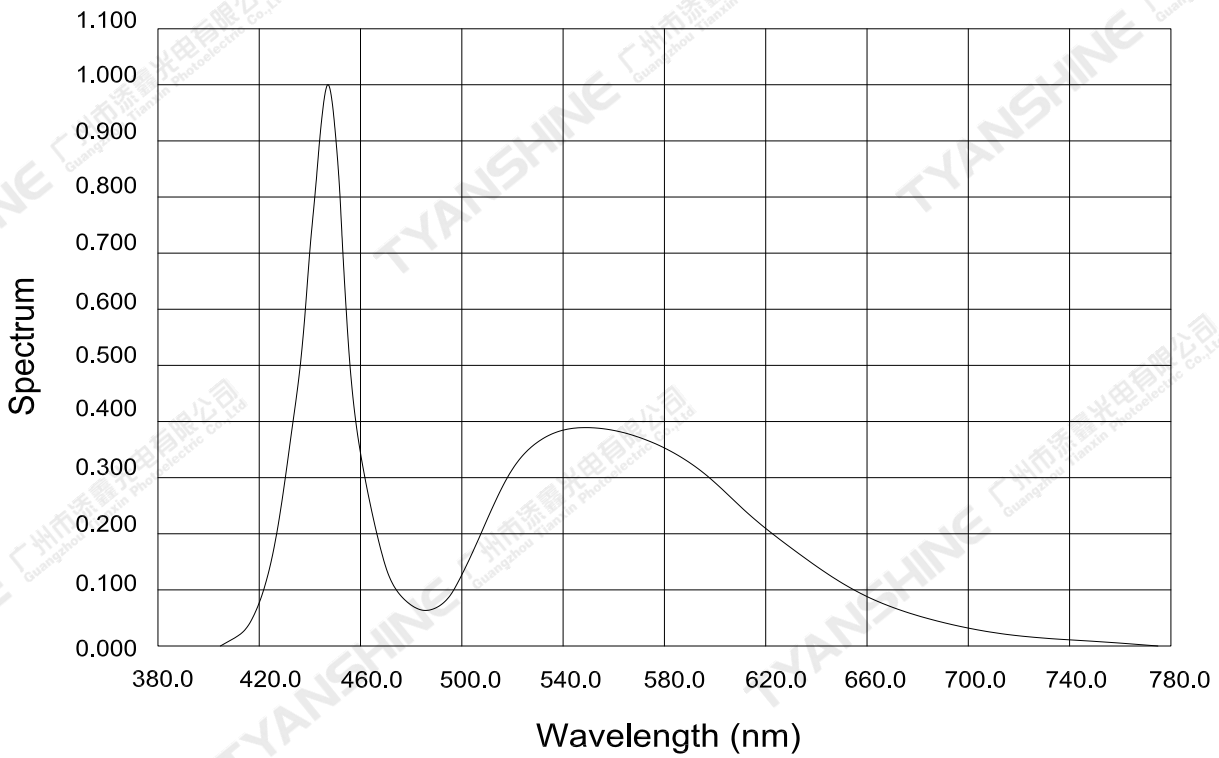


Forward Current VS. Luminous flux

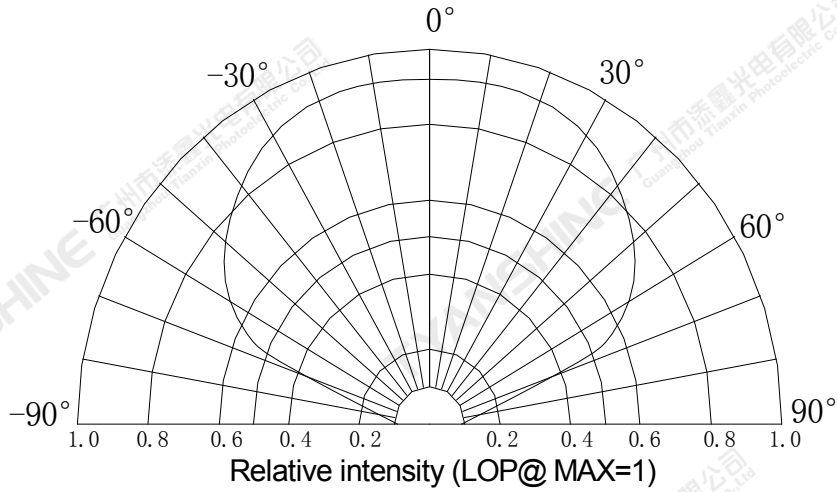




Relative Spectral Distribution



Beam Pattern



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 $\pm 5^\circ$.

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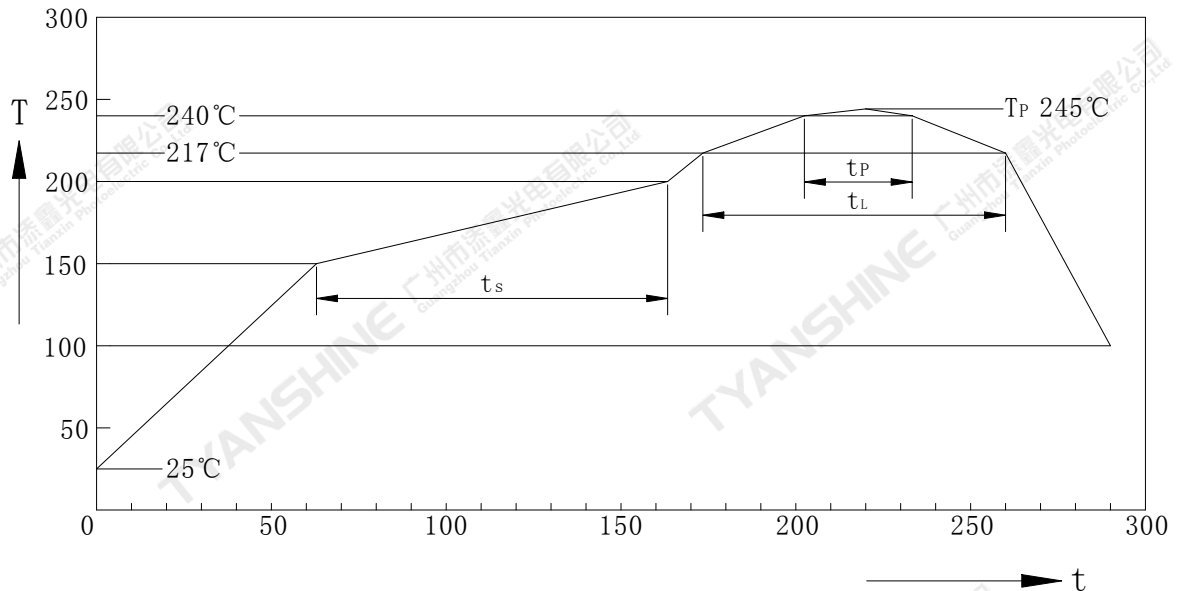
Usage Precautions

Storage Environment Condition

Temperature: 5°C ~ 30°C (41°F ~ 86°F)

Humidity: 60% RH Max.

Soldering Condition



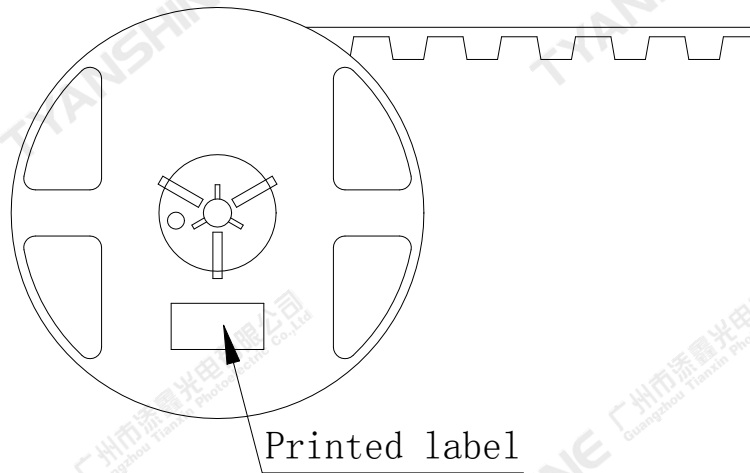
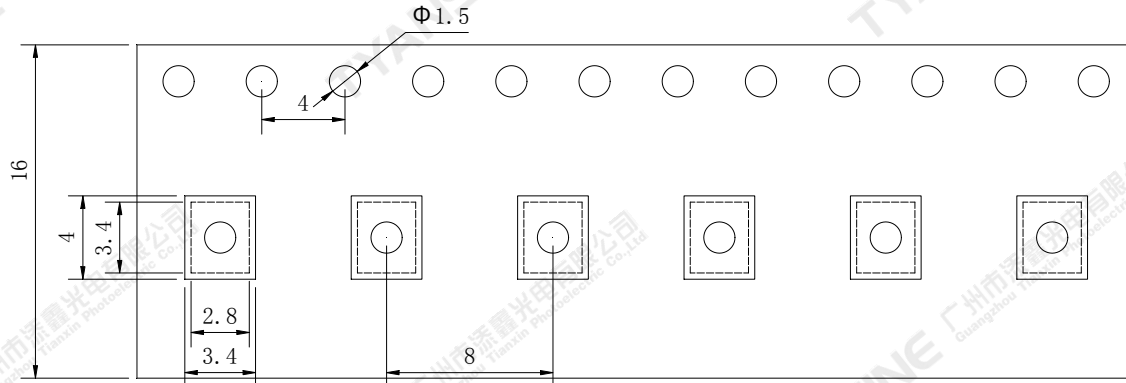
Profil-Charakteristik Profile Feature	Symbol	Pb-Free(SnAgCu)Assembly			Einheit Unit
		Minimum	Recommendation	Maximum	
Ramp-up Rate to Preheat 25°C to 150°C	-	-	2	3	K/s
Time t_s T_{Smin} to T_{Smax}	t_s	60	100	120	s
Ramp-up Rate to Peak T_{Smax} to T_p	-	-	2	3	K/s
Liquidus Temperature	T_L	217			°C
Time above Liquidus temperature	t_L	-	80	100	s
Peak Temperature	T_P	-	245	260	°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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