

TX-S3A140-002K

PRODUCT SPECIFICATION

Approved by:

Checked by:

Prepared by:

Part No.	TX-S3A140-002K	eSpec No.	WKF-BA3095	Page	1 of 8
-----------------	----------------	------------------	------------	-------------	--------

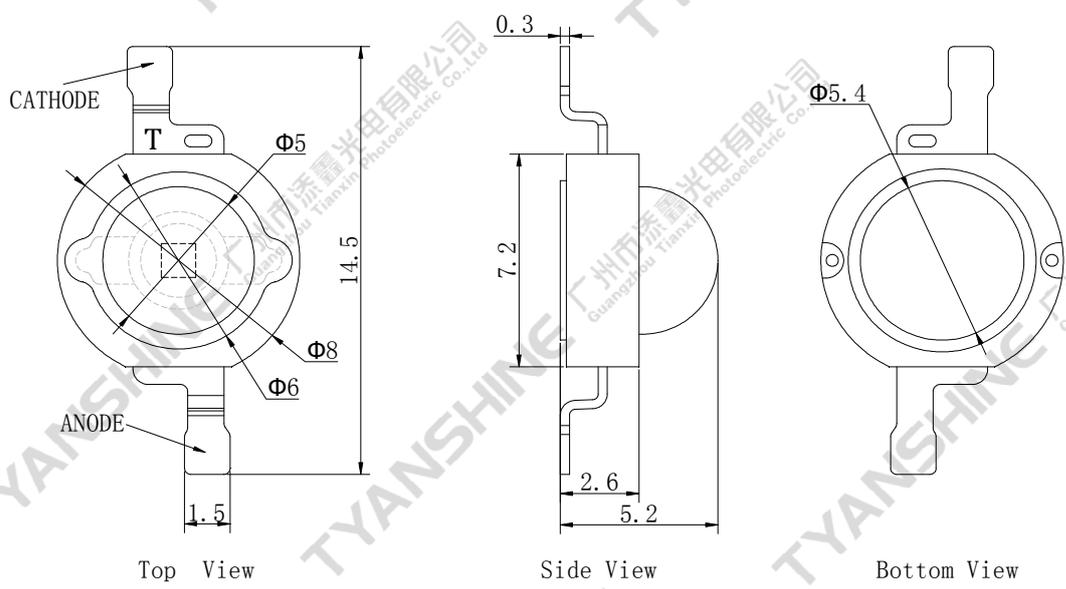
Features:

- ◆ Excellent Transiting Heat from LED Chip Operating under 700mA
- ◆ High Luminous Output
- ◆ No UV

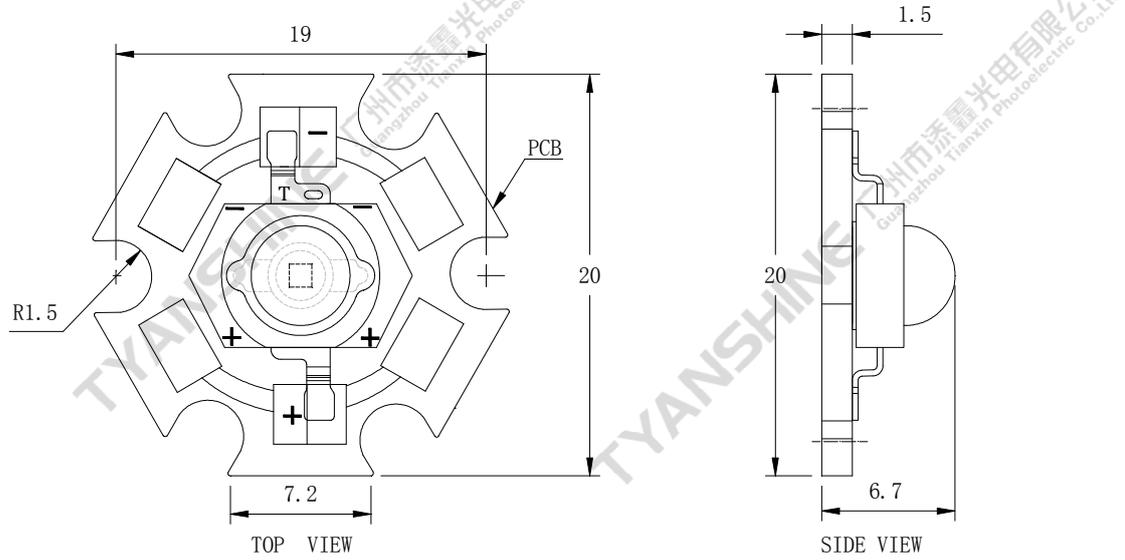
Typical purpose:

- ◆ Portable Flashlight
- ◆ Garden lighting
- ◆ General Lighting

Package Dimensions:



Installs on the aluminum sheet:



Part No.	TX-S3A140-002K	eSpec No.	WKF-BA3095	Page	2 of 8
-----------------	----------------	------------------	------------	-------------	--------

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 mm (0.01") unless otherwise noted.

Part NO.	Lens Color	Source Color
TX-S3A140-002K	Water Clear	Warm white

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	MAX.	Unit
LED Junction Temperature	T _j	150	°C
Power Dissipation	P _D	2800	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	I _{FP}	1000	mA
Continuous Forward Current	I _F	700	mA
Reverse Voltage	V _R	5	V
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Operating Temperature Range	T _{opr}	-30to +70	°C
Storage Temperature Range	T _{spr}	-40 to +100	
Lead Soldering Temperature	T _{sol}	Hand Soldering: 350°C for 8 sec.	

Notes:

1. Specifications are subject to change without notice.
2. The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.
3. 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.
5. This data-sheet only valid for six months.

Characteristics at $I_f=700mA$, $V_r=5V$ ($T_a=25^\circ C$):

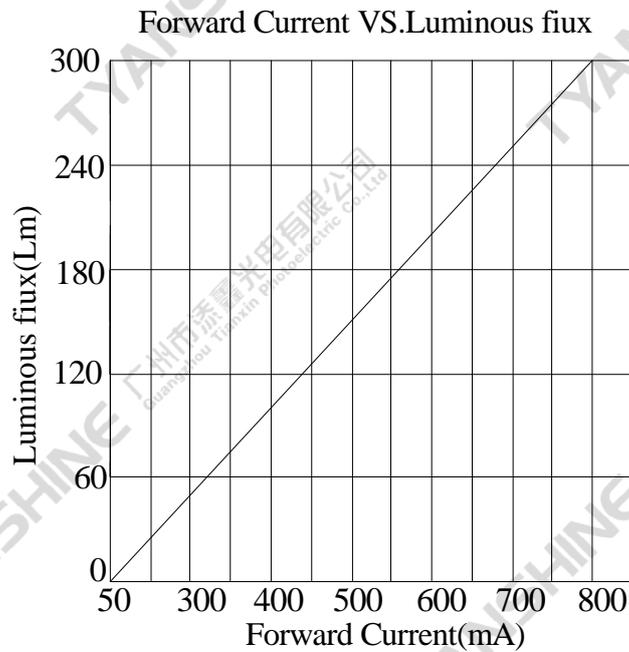
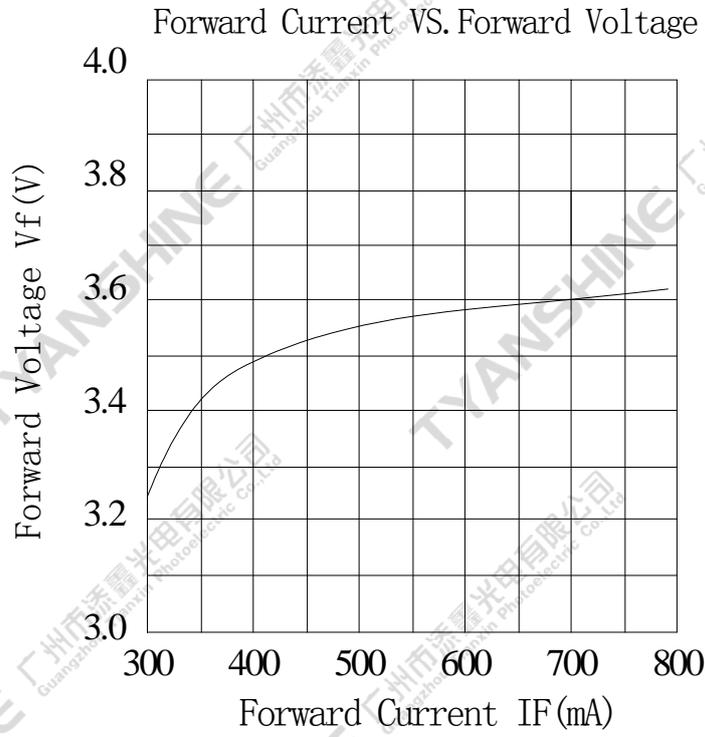
Parameter	Symbol	Values			Units
		Min.	Typ.	Max.	
Luminous Flux	ϕ_v	205	265	—	lm
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	140	—	Deg
Forward Voltage	V_f	3.2	3.6	4.0	V
Correlated Colour Temperature	CCT	2850	3000	3500	K
Reverse Current	I_R	—	—	10	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	10	—	K/C
Temperature Coefficient of Forward Voltage	$V\Delta F/T$	—	-2	—	mV/ $^\circ C$
Color Rendering Index	Ra	—	—	—	—

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. The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
4. Flux is measured with an accuracy of $\pm 15\%$.
5. Forward voltage is measured with an accuracy of $\pm 0.15V$.
6. CCT selection acc. to CCT groups and an accuracy of $\pm 300K$.

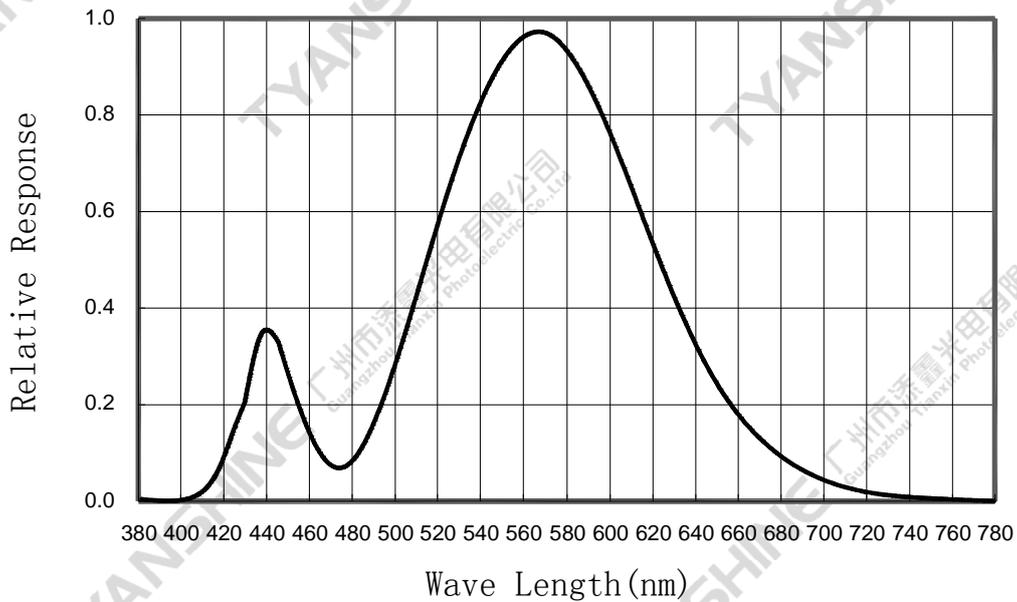
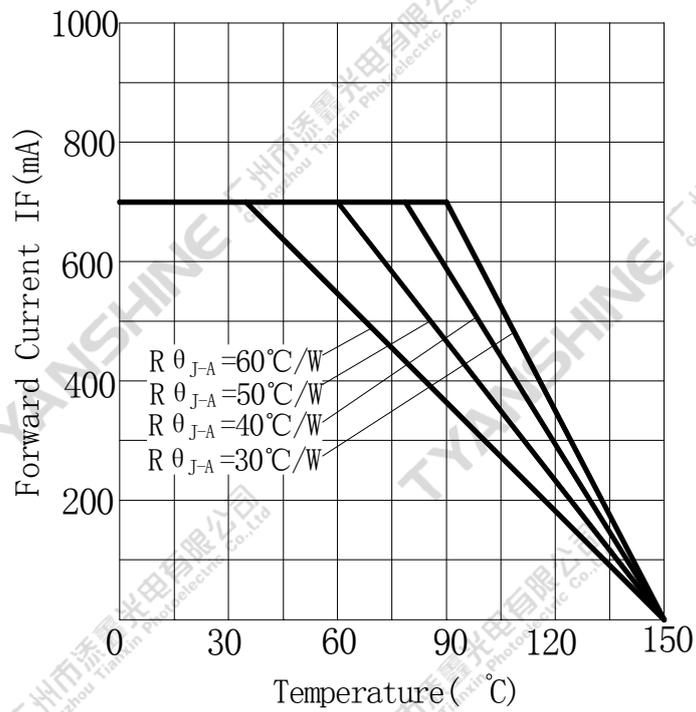
Typical Electrical / Optical Characteristics Curves

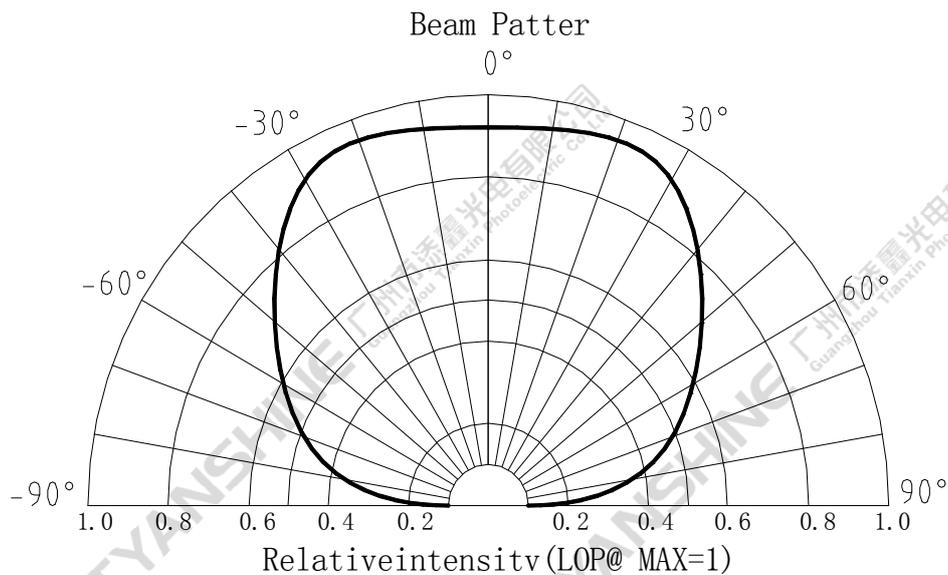
(25°C Ambient Temperature Unless Otherwise Noted)



Part No.	TX-S3A140-002K	eSpec No.	WKF-BA3095	Page	5 of 8
-----------------	----------------	------------------	------------	-------------	--------

Ambient Temperature VS. Forward Current





TYANSHINE 广州市添鑫光电有限公司 Guangzhou Tianxin Photoelectric Co., Ltd

Part No.	TX-S3A140-002K	eSpec No.	WKF-BA3095	Page	7 of 8
-----------------	----------------	------------------	------------	-------------	--------

PRECAUTION IN USE

Storage

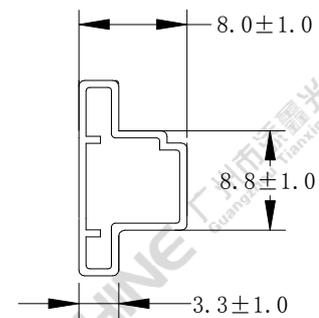
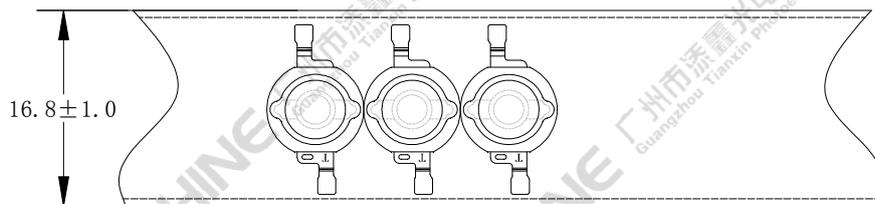
Recommended storage environment
 Temperature: 5°C ~ 30°C (41oF ~ 86oF)
 Humidity: 60% RH Max.

Soldering

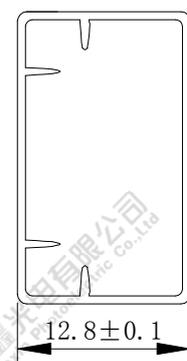
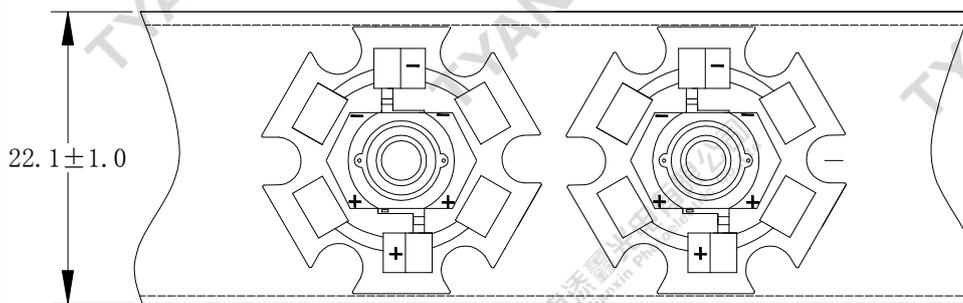
Hand Soldering	
Temperature	350°C Max.
Soldering time	8sec. Max.

Dimensions for Cannulation and Packaging

Quantity: 50PCS



Quantity: 24PCS



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±2.0 mm (0.08") unless otherwise noted.
3. Product is packaged with silica gel to protect the light-emitting zone. Please avoid the light-emitting area from being pressed, stressed, rubbed, come into contact with sharp metal part which would damage the product.

Part No.	TX-S3A140-002K	eSpec No.	WKF-BA3095	Page	8 of 8
-----------------	----------------	------------------	------------	-------------	--------