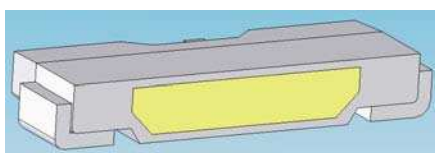
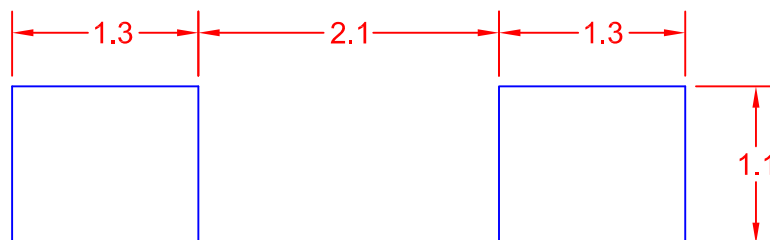
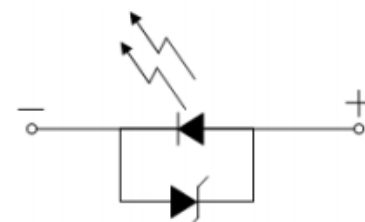
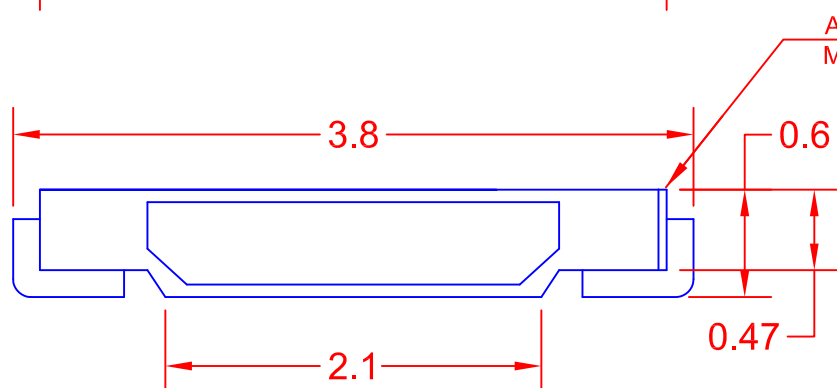
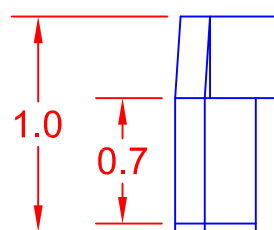
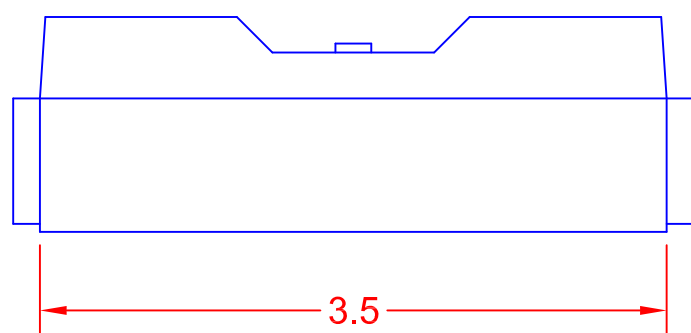




SURFACE MOUNT WHITE LED **SIDE VIEW 3.8 X 1.0 X 0.6mm**

FEATURES

SIDE VIEW WHITE
 LED (3.8 x 1.0 x 0.6mm)
 WHITE SMT PACKAGE
 LEAD FRAME PACKAGE WITH INDIVIDUAL 2-PINS
 GaN WITH YELLOW PHOSPHOR
 WIDE VIEW ANGLE (X: 120°/Y: 120°)
 IR REFLOW SOLDERING
 ESD PROTECTION
 Pb FREE



JKL PART NO.: ZSM-S3806-W

RECOMMENDED SOLDERING PAD LAYOUT





SURFACE MOUNT WHITE LED SIDE VIEW 3.8 X 1.0 X 0.6mm

SPECIFICATIONS

ABSOLUTE MAXIMUM RATINGS (TA = 25°C)
(LED die)

ITEM	SYMBOL	ABSOLUTE MAXIMUM RATING	UNIT
Forward Current	I_F	30	mA
Pulse Forward Current*	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	.110	W
Operating Temperature	T_{opr}	-30 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Soldering Temperature	T_{sld}	Reflow Soldering: 260° C for 10 secs Hand Soldering: 350° C for 3 secs	

(Zener diode)

ITEM	SYMBOL	CONDITION	MIN	MAX	UNIT
Reverse Leakage Current	I_R	$V_R = 5V$	---	0.5	uA
Zener Voltage	V_Z	$I_Z = 5mA$	5.8	6.8	V
Forward Voltage	V_F	$I_F = 20mA$	---	1.2	V

* I_{FP} Conditions: Pulse Width $\leq 10\text{msec}$, and duty $\leq 1/10$

ELECTRICAL & OPTICAL OPERATING CHARACTERISTICS (TA = 25°C)

ITEM	SYMBOL	CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	$I_F = 20mA$	2.9	3.5	Volt
Luminous Intensity	L_V	$I_F = 20mA$	1200	2300	mcd
Color Coordinates	x, y	$I_F = 20mA$	.247	.301	x
			.230	.304	y
Viewing Angle	---	$I_F = 20mA$	120° x	120° y	Degrees

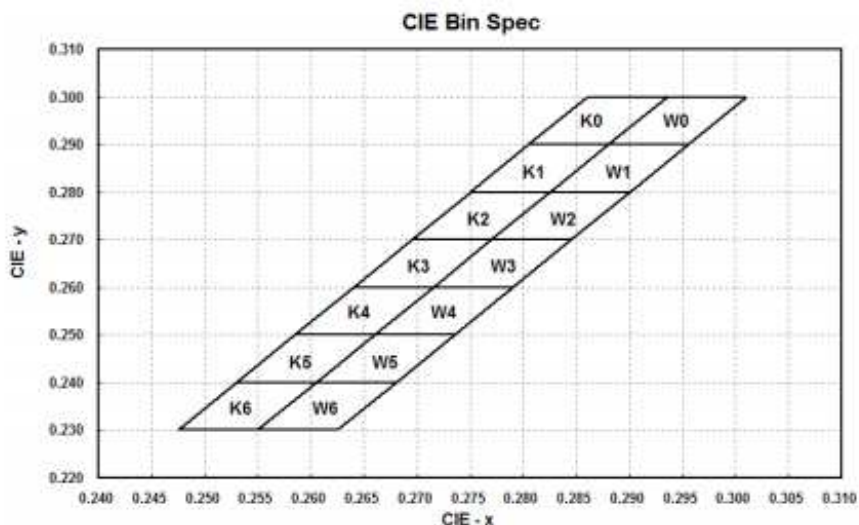


SURFACE MOUNT WHITE LED SIDE VIEW 3.8 X 1.0 X 0.6mm

BIN RANGE OF CHROMATICITY COORDINATES

	CIE-x	CIE-y		CIE-x	CIE-y
K0	0.2935	0.3000	W0	0.3010	0.3000
	0.2880	0.2900		0.2955	0.2900
	0.2805	0.2900		0.2880	0.2900
	0.2860	0.3000		0.2935	0.3000
K1	0.2880	0.2900	W1	0.2955	0.2900
	0.2825	0.2800		0.2900	0.2800
	0.2750	0.2800		0.2825	0.2800
	0.2805	0.2900		0.2880	0.2900
K2	0.2825	0.2800	W2	0.2900	0.2800
	0.2770	0.2700		0.2845	0.2700
	0.2695	0.2700		0.2770	0.2700
	0.2750	0.2800		0.2825	0.2800
K3	0.2770	0.2700	W3	0.2845	0.2700
	0.2715	0.2600		0.2790	0.2600
	0.2640	0.2600		0.2715	0.2600
	0.2695	0.2700		0.2770	0.2700
K4	0.2715	0.2600	W4	0.2790	0.2600
	0.2660	0.2500		0.2735	0.2500
	0.2585	0.2500		0.2660	0.2500
	0.2640	0.2600		0.2715	0.2600
K5	0.2660	0.2500	W5	0.2735	0.2500
	0.2605	0.2400		0.2680	0.2400
	0.2530	0.2400		0.2605	0.2400
	0.2585	0.2500		0.2660	0.2500
K6	0.2605	0.2400	W6	0.2680	0.2400
	0.2550	0.2300		0.2625	0.2300
	0.2475	0.2300		0.2550	0.2300
	0.2530	0.2400		0.2605	0.2400

CHROMATICITY DIAGRAM

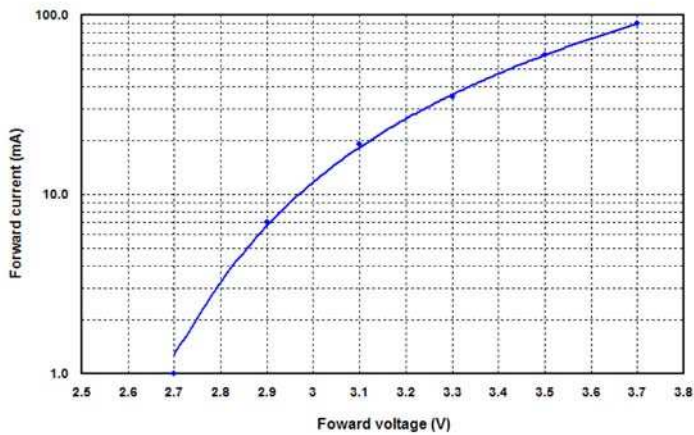




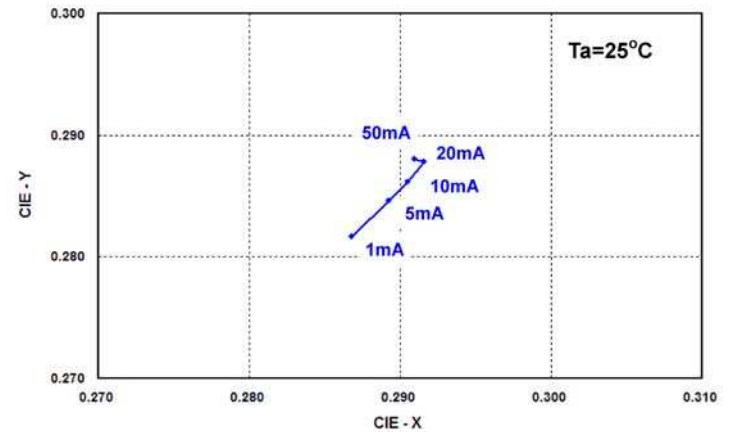
SURFACE MOUNT WHITE LED SIDE VIEW 3.8 X 1.0 X 0.6mm

TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

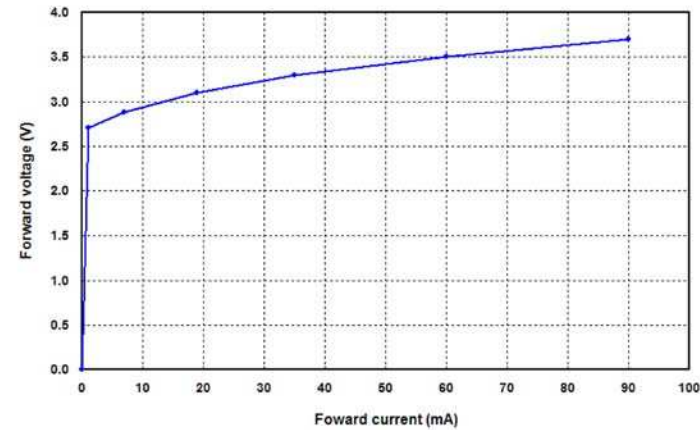
Forward Voltage vs. Forward Current



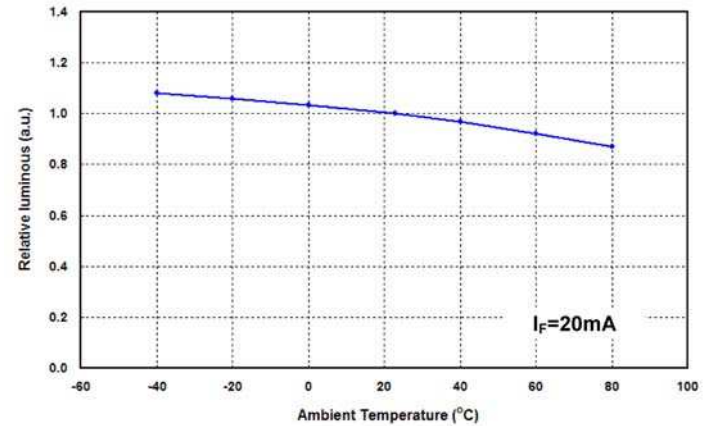
Forward Current vs. Chromaticity Diagram



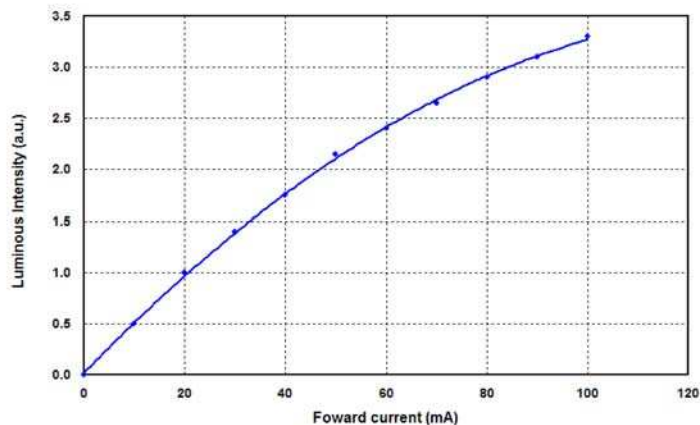
Forward Current vs. Forward Voltage



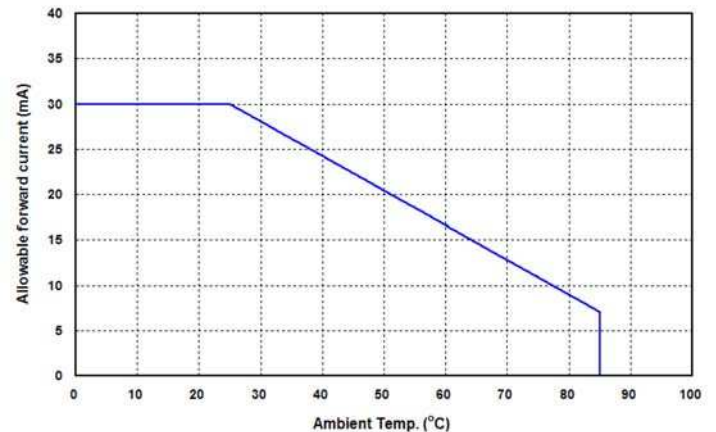
Ambient Temperature vs. Relative Luminous



Forward Current vs. Relative Luminosity



Ambient Temperature vs. Allowable Forward Current

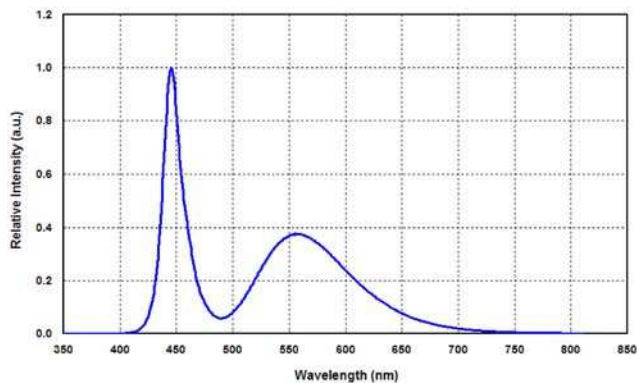




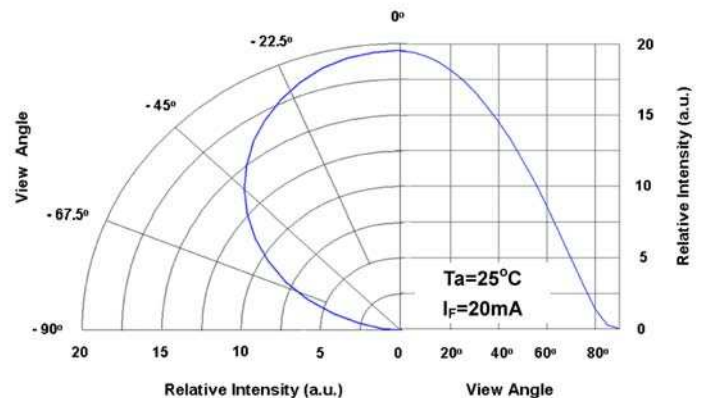
SURFACE MOUNT WHITE LED SIDE VIEW 3.8 X 1.0 X 0.6mm

TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES (Continued)

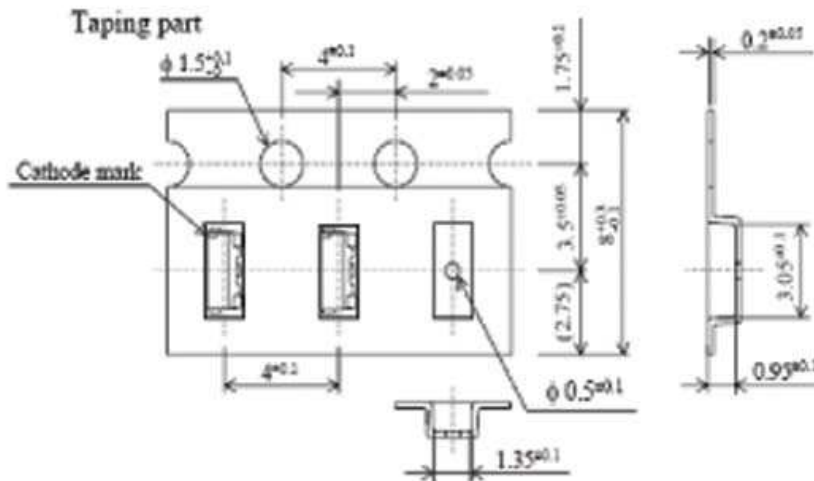
Spectrum



Radiation Pattern



PACKAGING: 3000 pcs/REEL



NOTES:

1. STORE IN ORIGINAL MOISTURE PROOF PACKAGING.
2. PACKAGING SHOULD BE STORED AT 30°C OR LESS AND AT 60% RH OR LESS.
3. LED SHOULD BE SOLDERED WITHIN 168 HOURS AFTER OPENING.
4. LED'S ARE STATIC SENSITIVE DEVICES. DO NOT HANDLE WITHOUT APPROPRIATE STATIC PROTECTION.
5. CLEAN ONLY WITH ISOPROPYL ALCOHOL. DO NOT USE ULTRASONIC CLEANING.
6. **CAUTION:** DO NOT LOOK DIRECTLY INTO LIT LED. INJURY TO EYES CAN OCCUR.