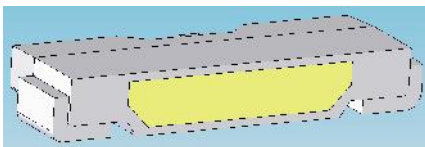
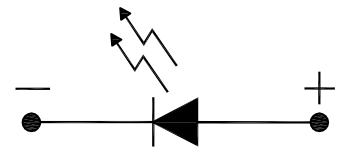
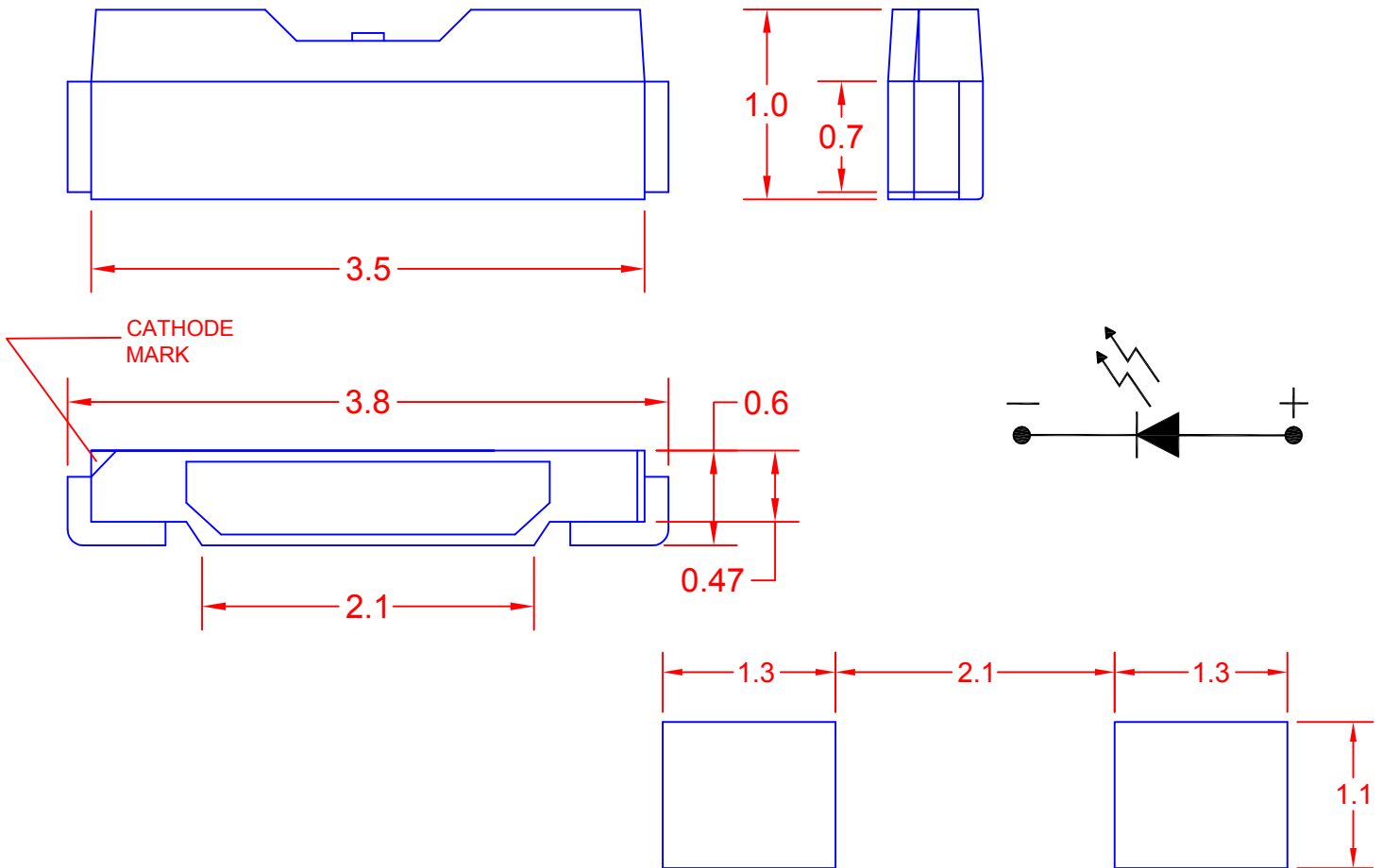




# SURFACE MOUNT WHITE LED SIDE VIEW 3.8 X 1.0 X 0.6mm

## 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
- 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	$P_D$	105	mW
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	

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

ITEM	SYMBOL	CONDITION	MIN	MAX	UNIT
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	2.8	3.4	Volt
Luminous Intensity	$L_V$	$I_F = 20\text{mA}$	6.5	9.75	lm
Color Coordinates	x, y	$I_F = 20\text{mA}$	.275	.305	x
			.235	.295	y
Viewing Angle	---	$I_F = 20\text{mA}$	120° x	120° y	Degrees

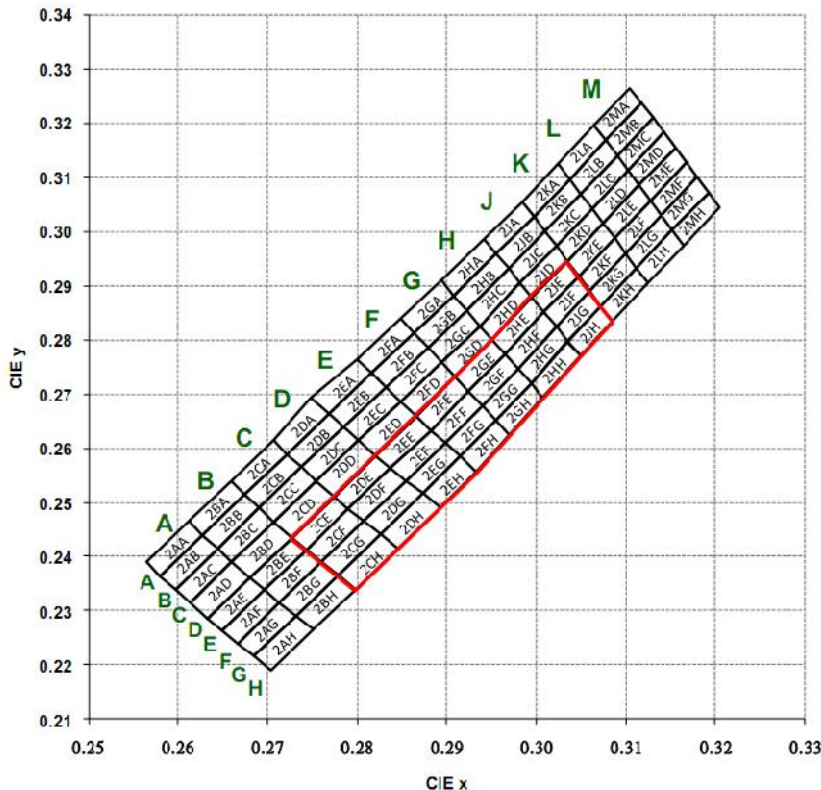


# SURFACE MOUNT WHITE LED SIDE VIEW 3.8 X 1.0 X 0.6mm

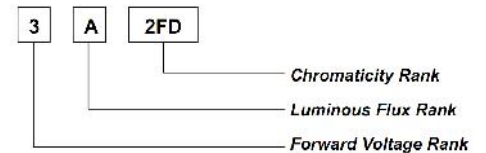
## BIN RANGE OF CHROMATICITY COORDINATES

<b>2CE</b> 0.2727 0.2435 0.2743 0.2413 0.2790 0.2488 0.2774 0.2510	<b>2DE</b> 0.2774 0.2510 0.2790 0.2488 0.2837 0.2563 0.2821 0.2585	<b>2EE</b> 0.2821 0.2585 0.2837 0.2563 0.2882 0.2632 0.2866 0.2658	<b>2FE</b> 0.2866 0.2658 0.2882 0.2632 0.2924 0.2705 0.2909 0.2732	<b>2GE</b> 0.2909 0.2732 0.2924 0.2705 0.2965 0.2773 0.2951 0.2800	<b>2HE</b> 0.2951 0.2800 0.2965 0.2773 0.3008 0.2851 0.2995 0.2878	<b>2JE</b> 0.2995 0.2878 0.3008 0.2851 0.3048 0.2918 0.3035 0.2945
<b>2CF</b> 0.2743 0.2413 0.2760 0.2390 0.2807 0.2465 0.2790 0.2488	<b>2DF</b> 0.2790 0.2488 0.2807 0.2465 0.2854 0.2540 0.2837 0.2563	<b>2EF</b> 0.2837 0.2563 0.2854 0.2540 0.2898 0.2610 0.2882 0.2632	<b>2FF</b> 0.2882 0.2632 0.2898 0.2610 0.2940 0.2679 0.2924 0.2705	<b>2GF</b> 0.2924 0.2705 0.2940 0.2679 0.2980 0.2746 0.2965 0.2773	<b>2HF</b> 0.2965 0.2773 0.2980 0.2746 0.3022 0.2824 0.3008 0.2851	<b>2JF</b> 0.3008 0.2851 0.3022 0.2824 0.3060 0.2890 0.3048 0.2918
<b>2CG</b> 0.2760 0.2390 0.2779 0.2366 0.2826 0.2441 0.2807 0.2465	<b>2DG</b> 0.2807 0.2465 0.2826 0.2441 0.2873 0.2516 0.2854 0.2540	<b>2EG</b> 0.2854 0.2540 0.2873 0.2516 0.2915 0.2585 0.2898 0.2610	<b>2FG</b> 0.2898 0.2610 0.2915 0.2585 0.2955 0.2652 0.2940 0.2679	<b>2GG</b> 0.2940 0.2679 0.2955 0.2652 0.2994 0.2719 0.2980 0.2746	<b>2HG</b> 0.2980 0.2746 0.2994 0.2719 0.3035 0.2797 0.3022 0.2824	<b>2JG</b> 0.3022 0.2824 0.3035 0.2797 0.3072 0.2862 0.3060 0.2890
<b>2CH</b> 0.2779 0.2366 0.2798 0.2340 0.2845 0.2415 0.2826 0.2441	<b>2DH</b> 0.2826 0.2441 0.2845 0.2415 0.2892 0.2490 0.2873 0.2516	<b>2EH</b> 0.2873 0.2516 0.2892 0.2490 0.2933 0.2557 0.2915 0.2585	<b>2FH</b> 0.2915 0.2585 0.2933 0.2557 0.2970 0.2625 0.2955 0.2652	<b>2GH</b> 0.2955 0.2652 0.2970 0.2625 0.3007 0.2692 0.2994 0.2719	<b>2HH</b> 0.2994 0.2719 0.3007 0.2692 0.3050 0.2770 0.3035 0.2797	<b>2JH</b> 0.3035 0.2797 0.3050 0.2770 0.3085 0.2835 0.3072 0.2862

## CHROMATICITY DIAGRAM



## BIN CODE DEFINITION

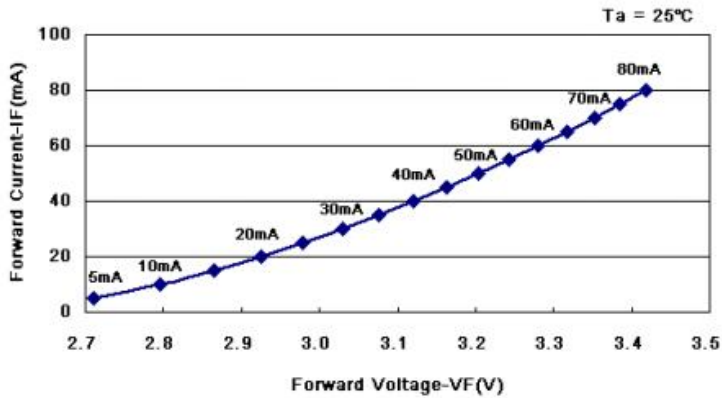




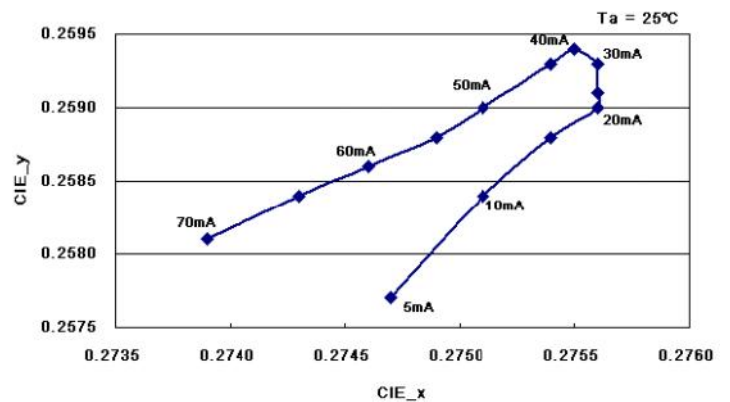
# SURFACE MOUNT WHITE LED SIDE VIEW 3.8 X 1.0 X 0.6mm

## TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

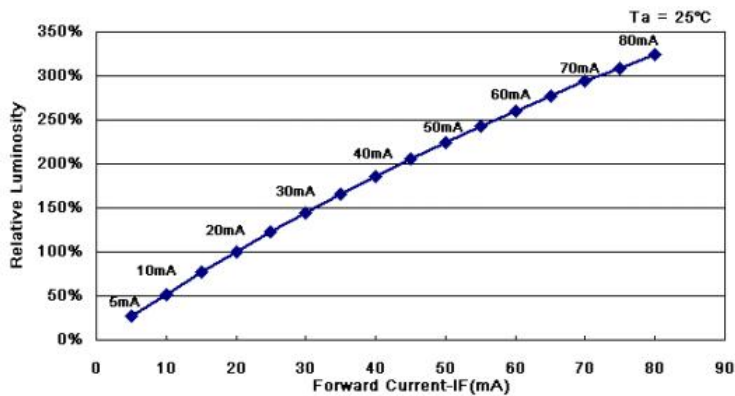
Forward Voltage vs. Forward Current



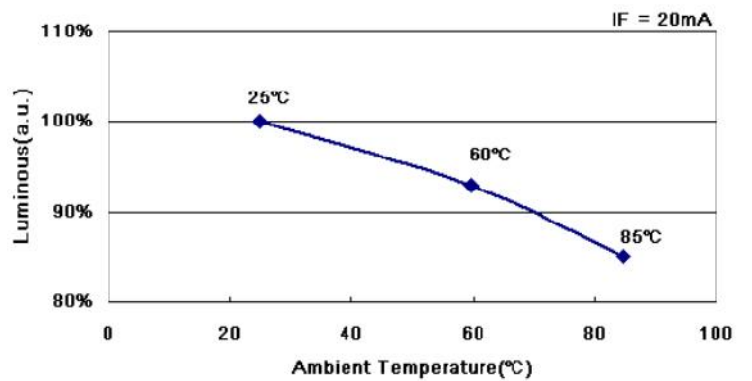
Forward Current vs. Chromaticity Diagram



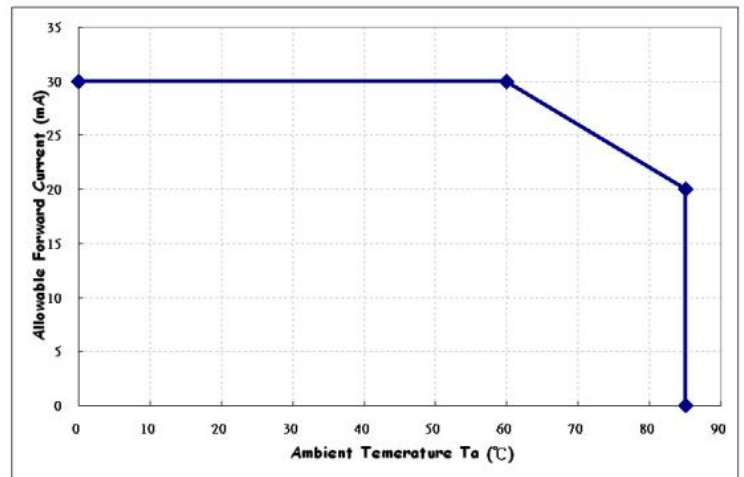
Forward Current vs. Relative Luminosity



Ambient Temperature vs. Relative Luminous



Ambient Temperature vs. Allowable Forward Current

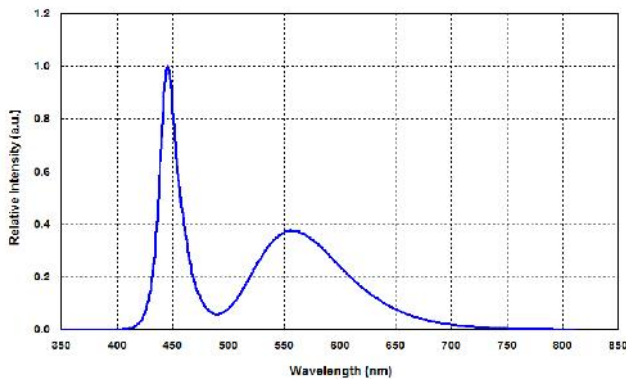




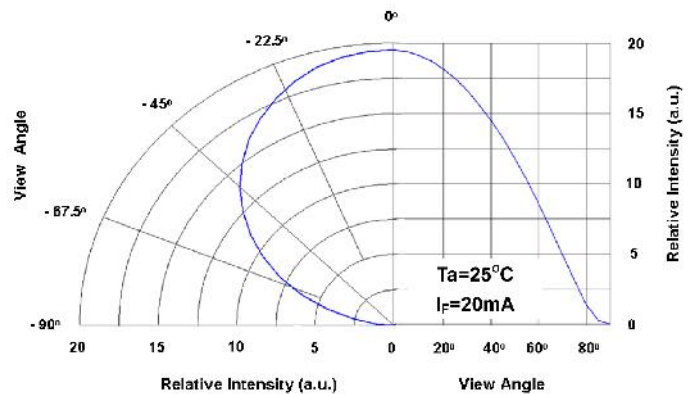
# SURFACE MOUNT WHITE LED SIDE VIEW 3.8 X 1.0 X 0.6mm

## TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES (Continued)

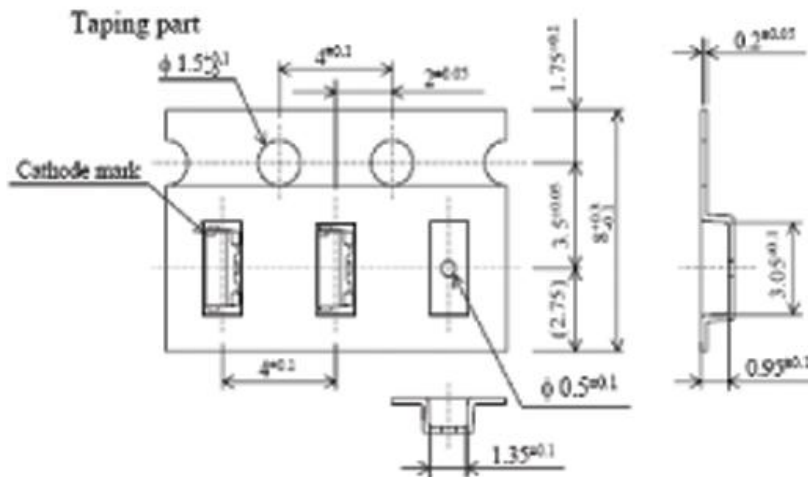
Spectrum



Radiation Pattern



## PACKAGING: 5000 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.