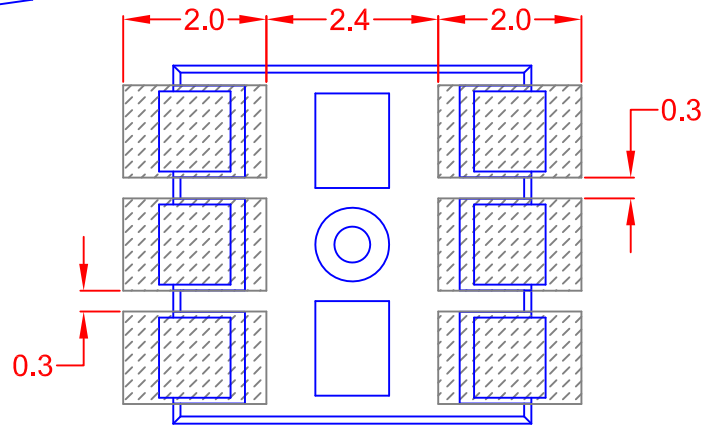
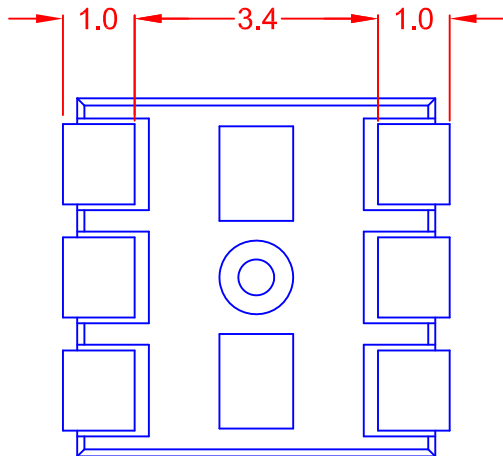
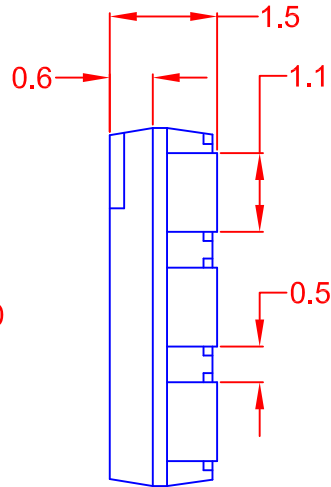
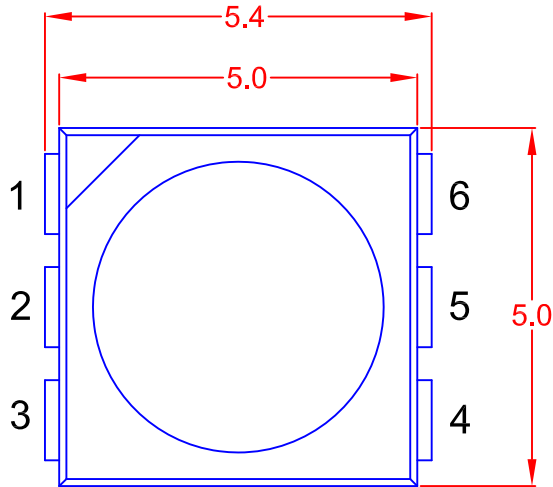


# SURFACE MOUNT WHITE LED TOP VIEW 5.4 X 5.0 X 1.6mm

## FEATURES

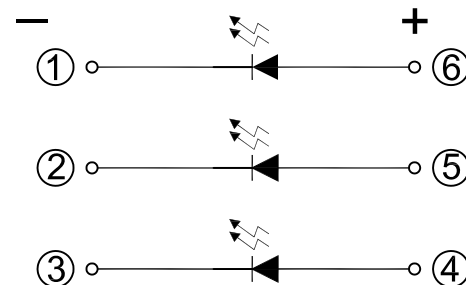
- TOP VIEW HIGH CRI LED
- LED (5.4 x 5.0 x 1.6mm)
- WHITE SMT PACKAGE
- LEAD FRAME PACKAGE WITH INDIVIDUAL 6-PINS
- GaN-BASED LED
- WIDE VIEW ANGLE (X: 120°/Y: 120°)
- IR REFLOW SOLDERING
- ESD PROTECTION
- Pb FREE

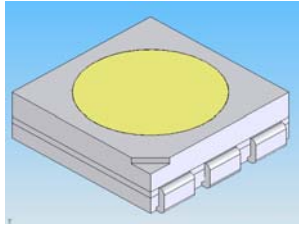
## DIMENSIONS



Recommended Soldering Pad Design

## Polarity





## SURFACE MOUNT WHITE LED TOP VIEW 5.4 X 5.0 X 1.6mm

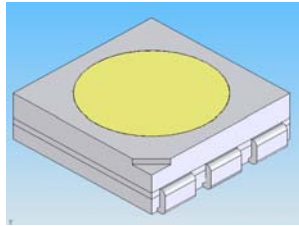
### SPECIFICATIONS

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

ITEM	SYMBOL	ABSOLUTE MAX. RATING	UNIT
Forward Current	$I_F$	30	mA/1 Chip
Pulse Forward Current*	$I_{FP}$	100	mA/1 Chip
Reverse Voltage	$V_R$	5	V/1 Chip
Power Dissipation	$P_D$	315	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	$V_f$	$I_F = 60\text{mA}$	2.8	4.0	Volt
Luminous Intensity	$I_v$		6,200	7,500	mcd



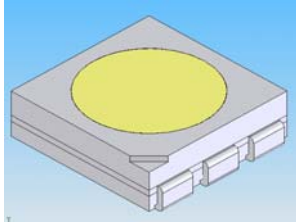
## SURFACE MOUNT WHITE LED TOP VIEW 5.4 X 5.0 X 1.6mm

### INTENSITY RANKS

RANK	COLOR	LUMINOUS INTENSITY (mcd)	LUMINOUS FLUX (lm)*
ZP	COOL	7,500	16.6 - 20.3
ZQ	WHITE	7,500	20.3 - 24.5
ZO	NEUTRAL	7,300	13.6 - 16.6
ZP		7,300	16.6 - 20.3
ZQ	WHITE	7,300	20.3 - 24.5
ZO	WARM	6,200	13.6 - 16.6
ZP	WHITE	6,200	16.6 - 20.3

\*LUMINOUS FLUX MEASUREMENTS ALLOWANCE IS ± 10%

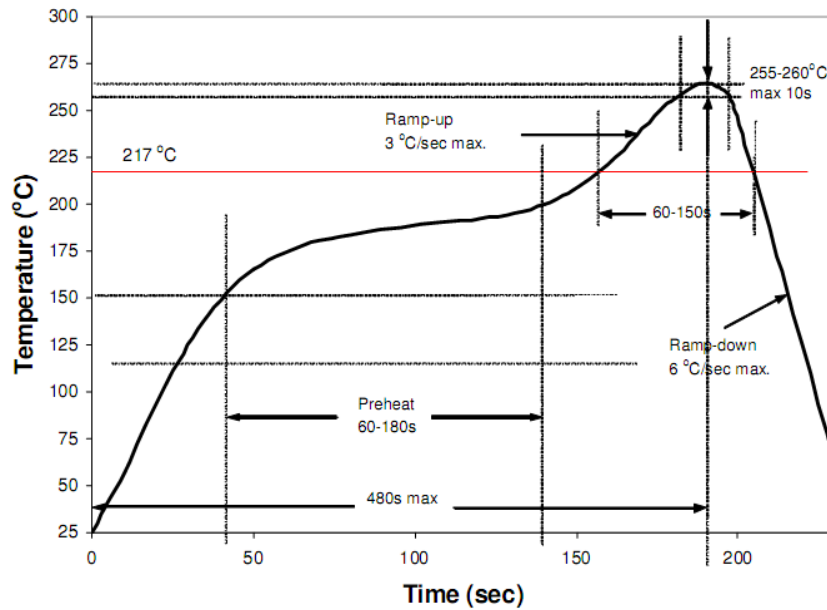
PART NUMBERS	ITEM	CORRELATED COLOR TEMPERATURE	COLOR RENDING INDEX
ZSM-T5050X-CW	COOL WHITE	5000K - 10,000K	70
ZSM-T5050X-NW	NEUTRAL WHITE	3800K - 5000K	75
ZSM-T5050X-WW	WARM WHITE	2670K - 3800K	80



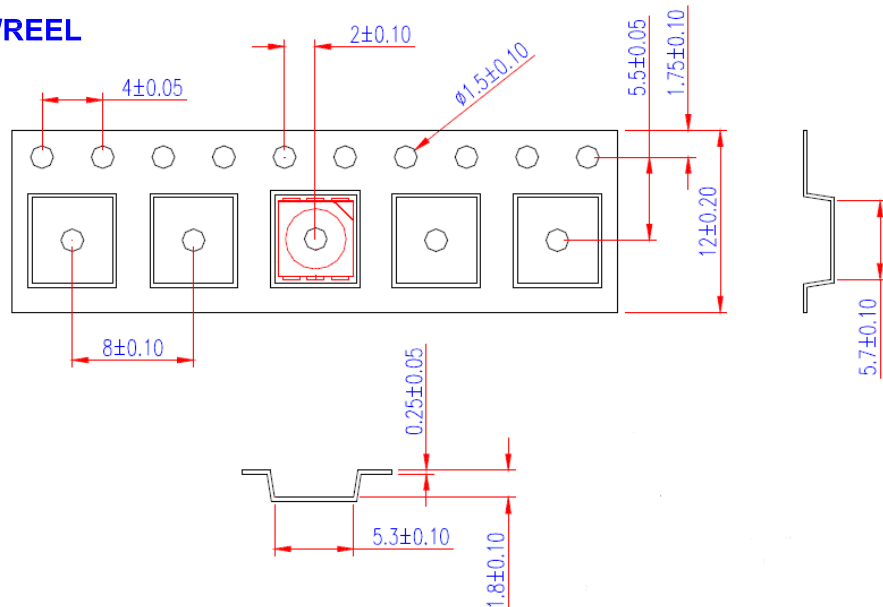
# SURFACE MOUNT WHITE LED TOP VIEW 5.4 X 5.0 X 1.6mm

## LEAD-FREE SOLDER

Classification Reflow Profile



## PACKAGING: 1000 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.