



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

5060WW

WARM WHITE



Features

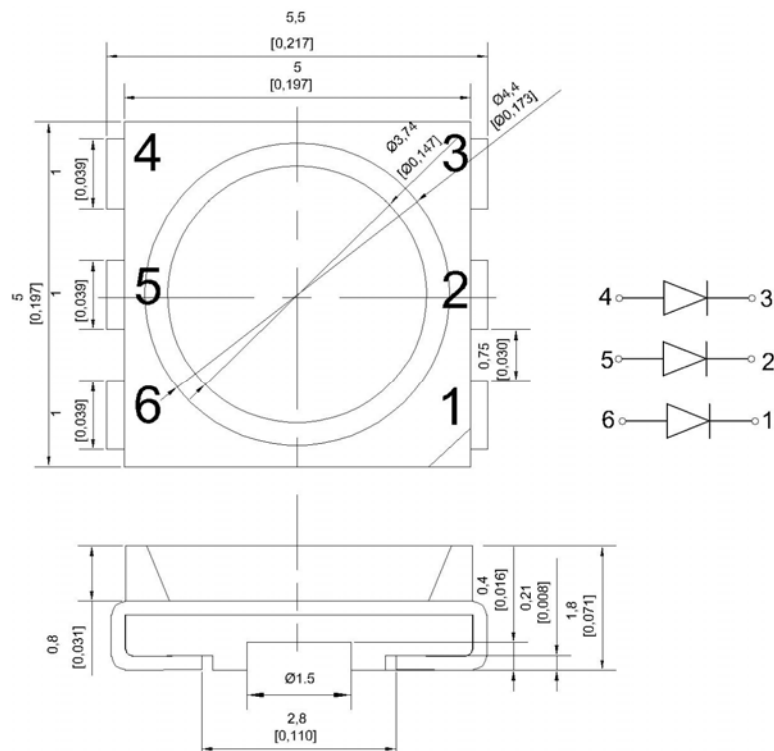
- CHIPS CAN BE CONTROLLED SEPARATELY.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- PACKAGE: 1000PCS / REEL.

Description

The White source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide White Light Emitting Diode.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs. All devices, equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is ± 0.2 mm unless otherwise noted.
3. An epoxy meniscus may extend about 1.5mm down the leads.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 60mA		Viewing Angle
			Min.	Typ.	2θ1/2
5060WW	WARM WHITE (InGaN)	Yellow Diffused	2400	3400	100°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Min.	Typ.	Units	Test Conditions
V _F	Forward Voltage	Warm White	3.0	3.2	V	I _F =60mA
I _R	Reverse Current	Warm White		5	uA	V _R = 5V
X	Chromaticity Coordinates	Warm White		0.38		
Y				0.38		
C	Capacitance	Warm White		100	pF	V _F =0V;f=1MHz

Absolute Maximum Ratings at TA=25°C

Parameter	White	Units
Power dissipation	315	mW
DC Forward Current	90	mA
Peak Forward Current [1]	300	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

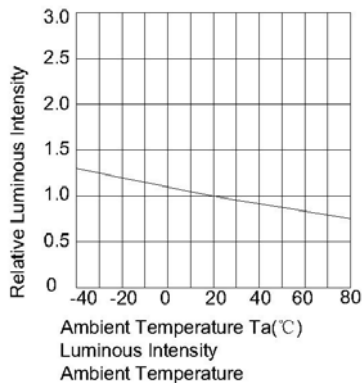
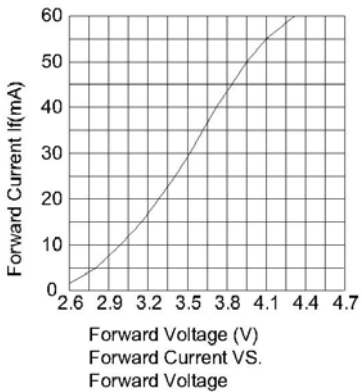
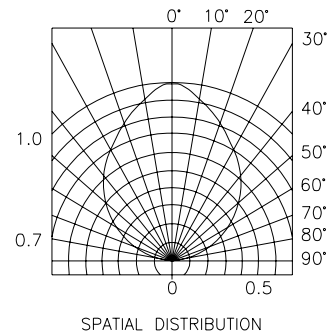
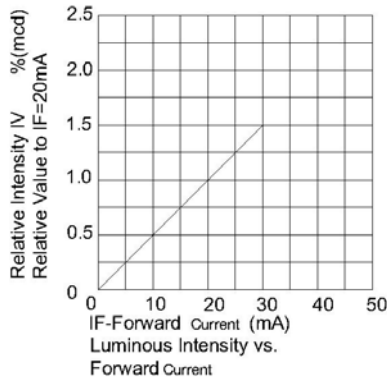
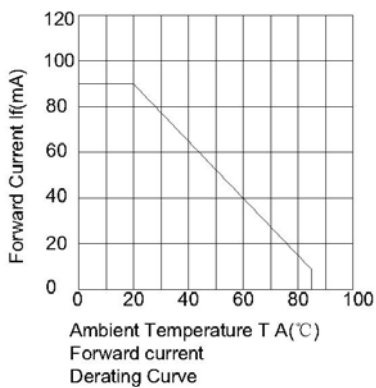
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WARM WHITE

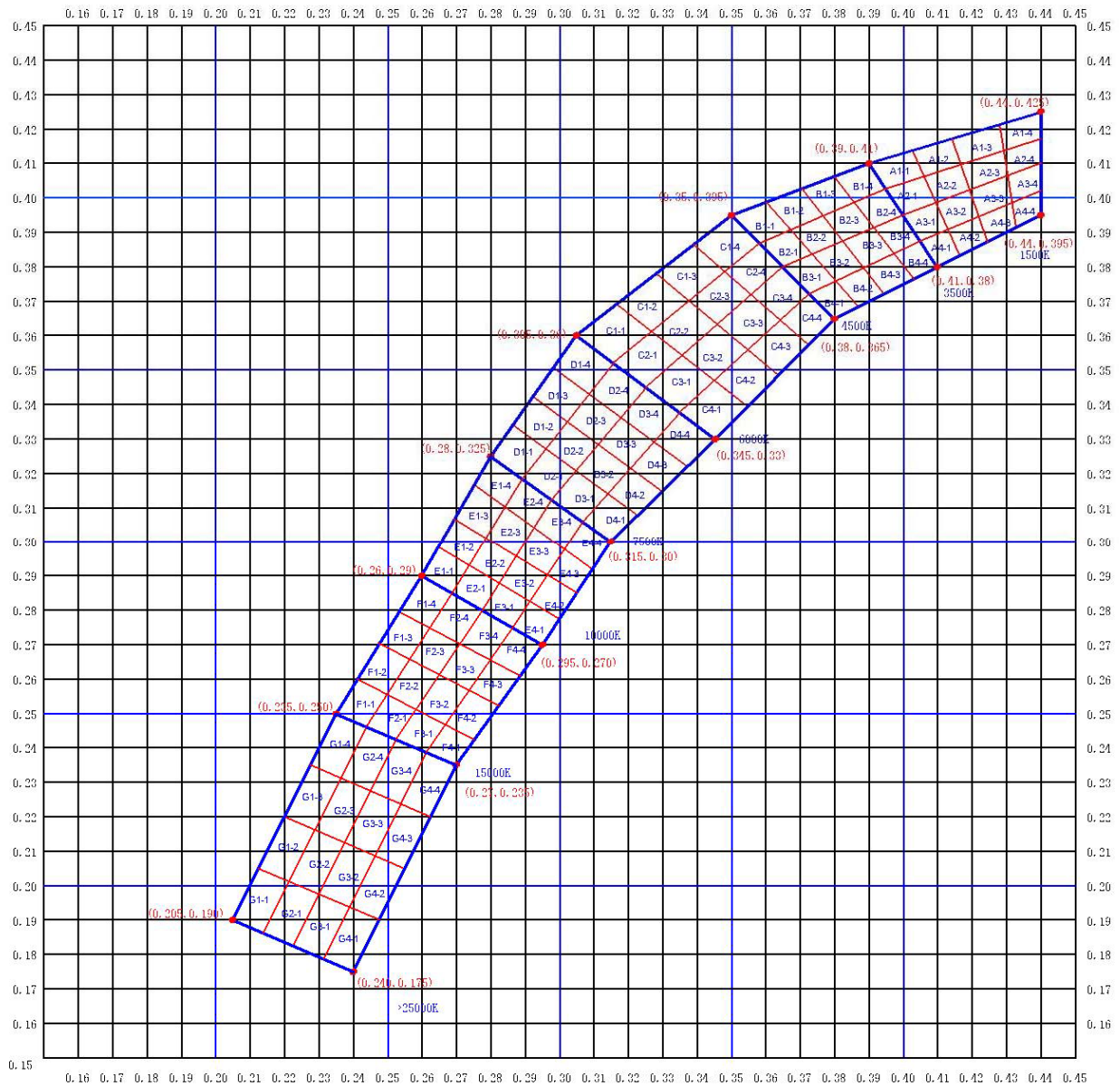
Reliability Test Items And Conditions

The reliability of products shall be satisfied with items listed below.
 Confidence level :90% LTPD :10%

No.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Rc
1	Reflow	Temp:240°C±5°C Min.5 sec.	6 Min.	22Pcs.	0/1
2	Temperature Cycle	H:+100°C 15 min. ∞ 5 min L:-40°C 15 min.	300 Cycles	22Pcs.	0/1
3	Thermal Shock	H:+100°C 5 min. ∞ 10 sec. L:-10°C 5 min.	300 Cycles	22Pcs.	0/1
4	High Temperature Storage	Temp.:100°C	1000Hrs.	22Pcs.	0/1
5	Low Temperature Storage	Temp.: -55°C	1000Hrs.	22Pcs.	0/1
6	DC Operating Life	I _F =20mA	1000Hrs.	22Pcs.	0/1
7	High Temperature/High Humidity	85°C/R.H85%	1000Hrs.	22Pcs.	0/1



CIE CHROMATICITY DIAGRAM

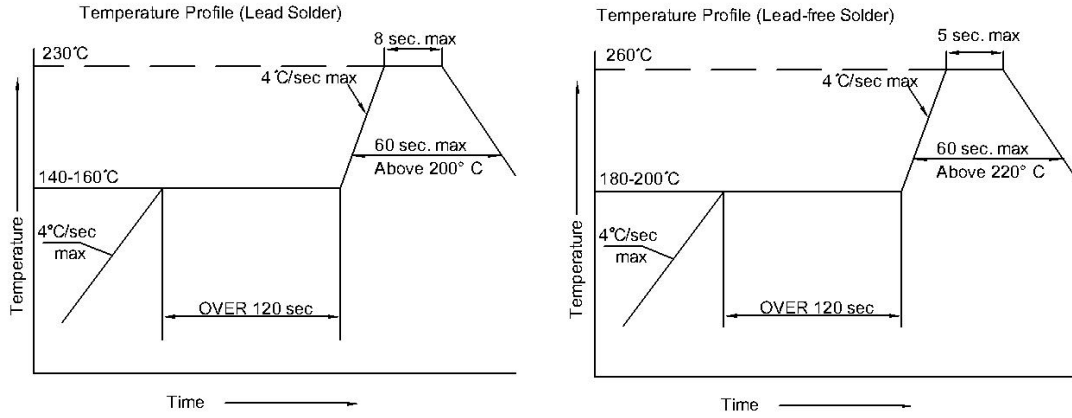


G☒ X:0.24 Y:0.22	X	0.205	0.235	0.270	0.240	C☒ X:0.35 Y:0.36	X	0.305	0.350	0.380	0.345
	Y	0.190	0.250	0.235	0.175		Y	0.360	0.395	0.365	0.330
F☒ X:0.265 Y:0.26	X	0.235	0.260	0.295	0.270	B☒ X:0.38 Y:0.38	X	0.350	0.390	0.410	0.380
	Y	0.250	0.290	0.270	0.235		Y	0.395	0.410	0.380	0.365
E☒ X:0.285 Y:0.30	X	0.260	0.280	0.315	0.295	A☒ X:0.41 Y:0.40	X	0.390	0.440	0.440	0.410
	Y	0.290	0.325	0.300	0.270		Y	0.410	0.425	0.395	0.380
D☒ X:0.31 Y:0.33	X	0.280	0.305	0.345	0.315	Tolerance for each Bin limit is ± 0.15 .					
	Y	0.325	0.360	0.330	0.300						

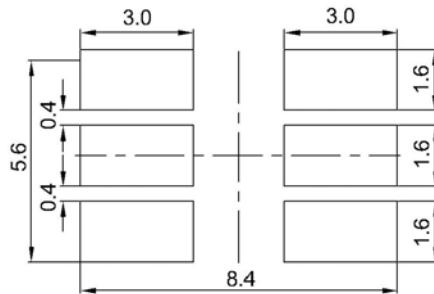
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SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)

