



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

DW-06-WW-XX

WARM WHITE

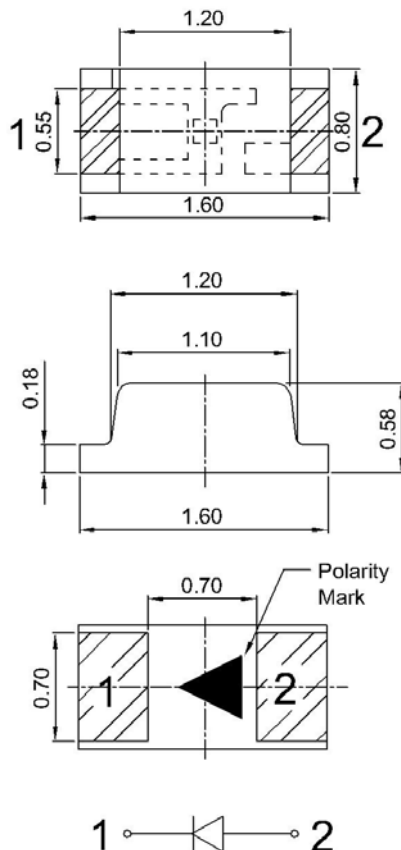
Features

- 1.6mmX0.8mm SMT LED, 0.58mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- PACKAGE: 4000PCS / REEL .

Description

The White source color devices are made with DH InGaN on GaAs substrate Light Emitting Diode.

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.
4. Burr around bottom of epoxy may be 0.5mm max..

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA			Viewing Angle
			Code	Min.	Max.	2θ1/2
DW-06-WW-XX	WHITE (InGaN)	WATER CLEAR	N	160	210	120°
			O	355	460	
			P	460	600	

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	Code	Min.	Typ.	Max.	Units	Test Conditions
VF	Forward Voltage	White	H	2.8		2.9	V	IF=20mA
			I	3.2		3.4		
			J	3.4		3.6		
			K	3.6		3.8		
IR	Reverse Current	White				10	uA	VR = 5V
X	Chromaticity Coordinates	White			0.42			
Y					0.42			
C	Capacitance	White			100		pF	VF=0V;f=1MHz

Absolute Maximum Ratings at TA=25°C

Parameter	White	Units
Power dissipation	114	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

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

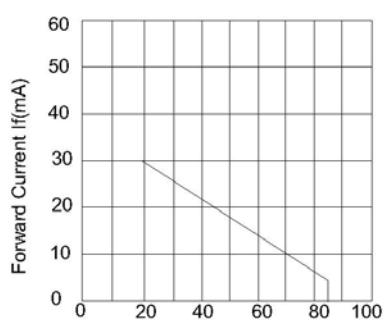
WHITE

DF-0603-WWxx

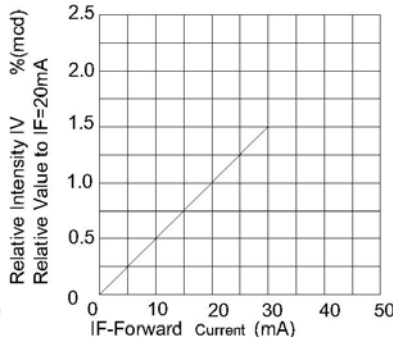
Reliability Test Items And Conditions

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

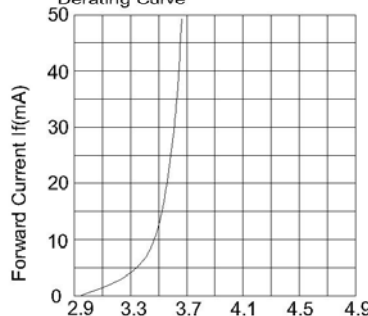
No.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Rc
1	Reflow	Temp:240°C±5°C Min.5 sec.	6 Min.	22Pcs.	0/1
2	Temperature Cycle	H:+100°C 15 min. ∞ 5 min L:-40°C 15 min.	300 Cycles	22Pcs.	0/1
3	Thermal Shock	H:+100°C 5 min. ∞ 10 sec. L:-10°C 5 min.	300 Cycles	22Pcs.	0/1
4	High Temperature Storage	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



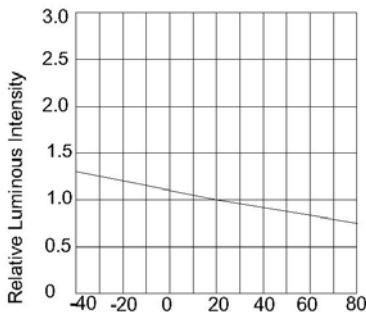
Ambient Temperature T_A(°C)
 Forward current
 Derating Curve



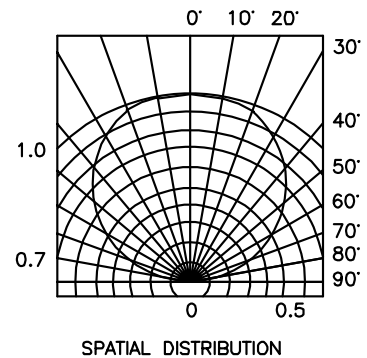
IF-Forward Current (mA)
 Luminous Intensity vs.
 Forward Current



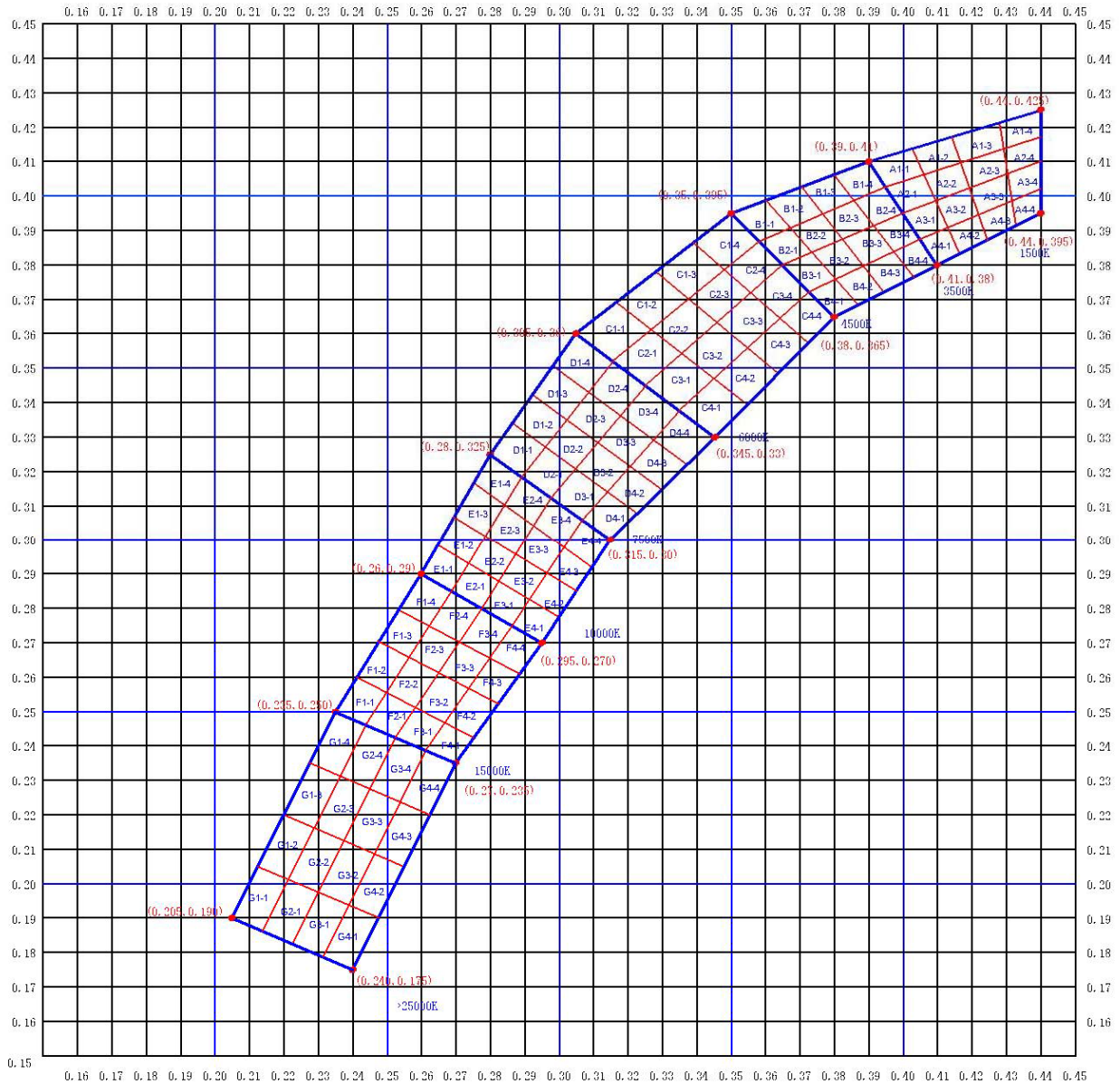
Forward Voltage (V)
 Forward Current VS.
 Forward Voltage



Ambient Temperature T_a(°C)
 Luminous Intensity
 Ambient Temperature



CIE CHROMATICITY DIAGRAM

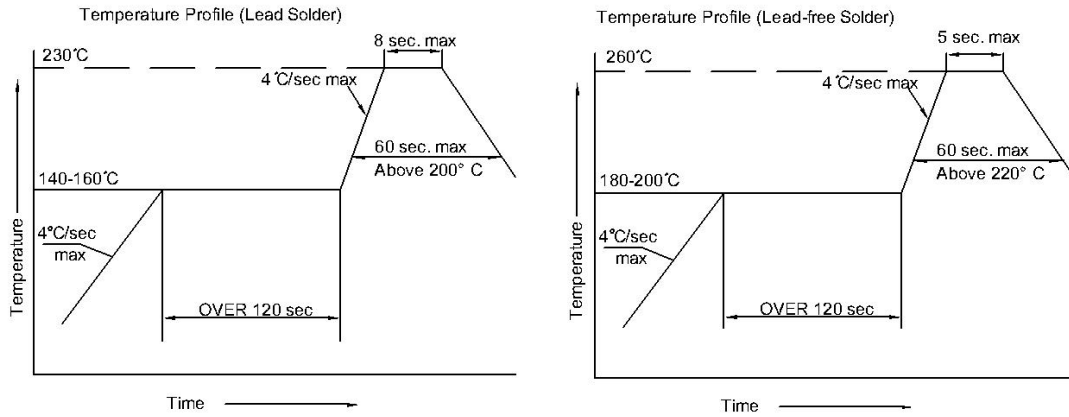


G☐ X:0.24 Y:0.22	X	0.205	0.235	0.270	0.240	C☐ X:0.35 Y:0.36	X	0.305	0.350	0.380	0.345
	Y	0.190	0.250	0.235	0.175		Y	0.360	0.395	0.365	0.330
F☐ X:0.265 Y:0.26	X	0.235	0.260	0.295	0.270	B☐ X:0.38 Y:0.38	X	0.350	0.390	0.410	0.380
	Y	0.250	0.290	0.270	0.235		Y	0.395	0.410	0.380	0.365
E☐ X:0.285 Y:0.30	X	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						

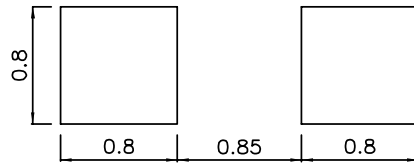
DF-0603-WWxx

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)

