

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

AM2520MBCK08 BLUE

PRELIMINARY SPEC

Features

- ●SUBMINIATURE PACKAGE.
- ●WIDE VIEWING ANGLE.
- ●YOKE LEAD.
- ●LONG LIFE - SOLID STATE RELIABILITY.
- ●LOW PACKAGE PROFILE.
- ●PACKAGE : 1000PCS / REEL.
- ●RoHS COMPLIANT.

Description

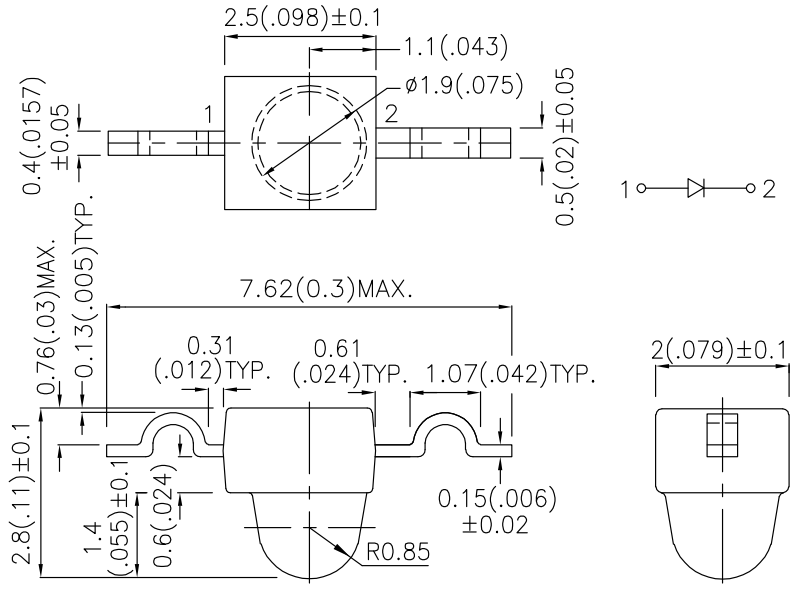
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

Static electricity and surge damage the LEDS.

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 dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
AM2520MBCK08	BLUE (GaN)	WATER CLEAR	10	30	20°

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

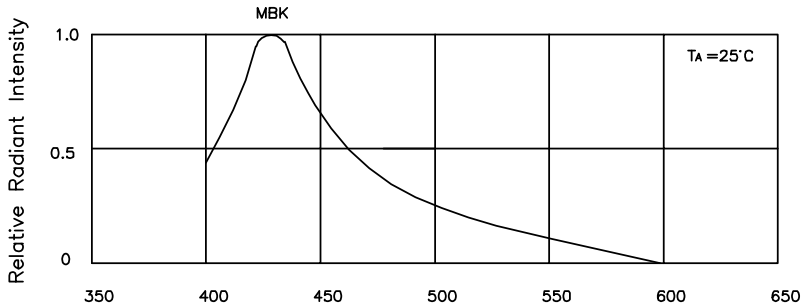
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	430		nm	I_F=20mA
λD	Dominant Wavelength	Blue	466		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Blue	60		nm	I_F=20mA
C	Capacitance	Blue	100		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Blue	4.0	5.2	V	I_F=20mA
I_R	Reverse Current	Blue		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

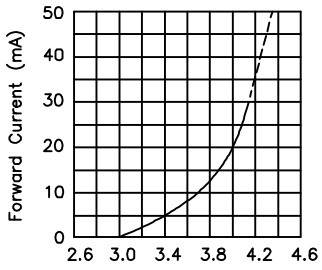
Parameter	Blue	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

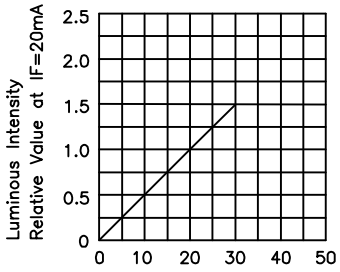


RELATIVE INTENSITY Vs. WAVELENGTH

Blue **AM2520MBCK08**



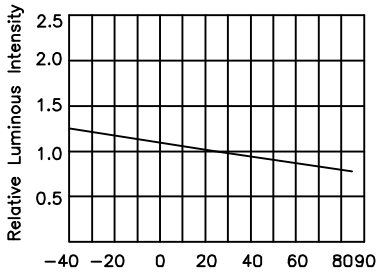
FORWARD CURRENT Vs.
FORWARD VOLTAGE



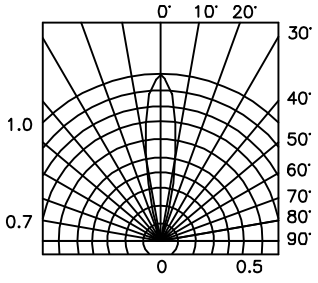
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



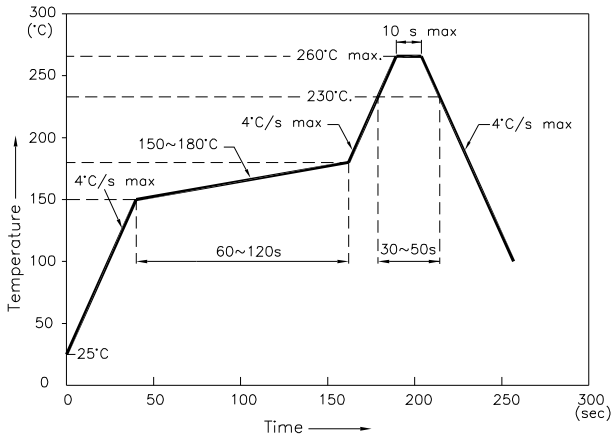
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

AM2520MBCK08

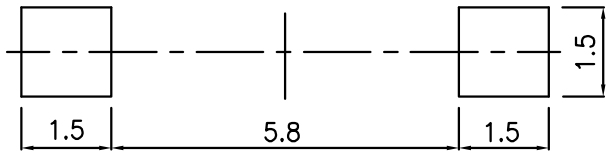
Reflow Soldering Profile For Lead-free SMT Process.



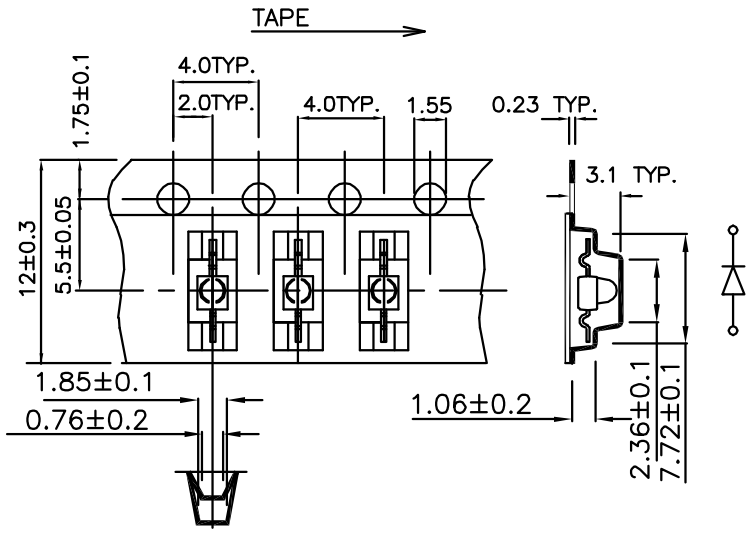
NOTES:

1. We recommend the reflow temperature 245°C(+/−5°C).The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern
(Units : mm)



Tape Specifications
(Units : mm)



Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength),the condition as follows:

1.Wavelength: +/-1nm (Test condition is based on the sorting standard).

2.Luminous intensity: +/-15% (Test condition is based on the sorting standard).

3.Forward voltage: +/-0.1V (Test condition is based on the sorting standard).