AM2520ID04	AM2520EC04
AM2520SGD04	AM2520SGC04
AM2520YD04	AM2520YC04

Features

- ●SUBMINIATURE PACKAGE.
- ●WIDE VIEWING ANGLE.
- ●RIGHT ANGLE BEND.
- ●LONG LIFE SOLID STATE RELIABILITY.
- ●LOW PACKAGE PROFILE.

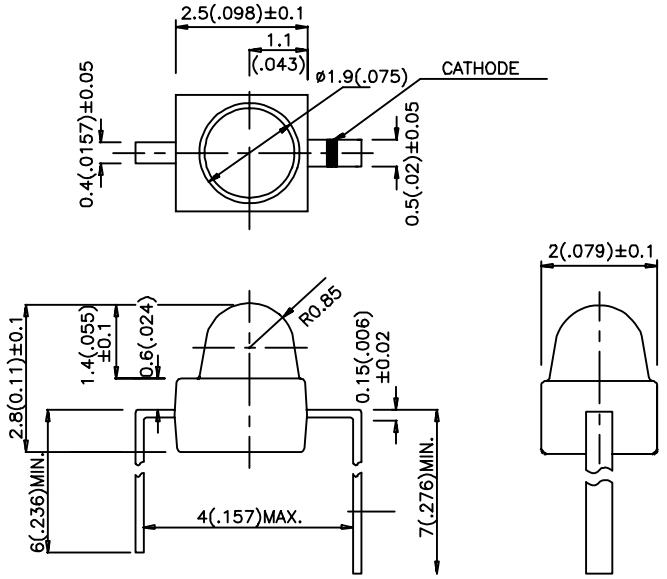
Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

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

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 lead emerge package.
4. Specifications are subjected to change without notice.

Kingbright

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
AM2520ID04	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	30	60°
AM2520EC04	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	20	70	30°
AM2520SGD04	SUPER BRIGHT GREEN (GaP)	GREEN DIFFUSESD	3	10	60°
AM2520SGC04	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	40	100	30°
AM2520YD04	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	3	10	60°
AM2520YC04	YELLOW (GaAsP/GaP)	WATER CLEAR	20	40	30°

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

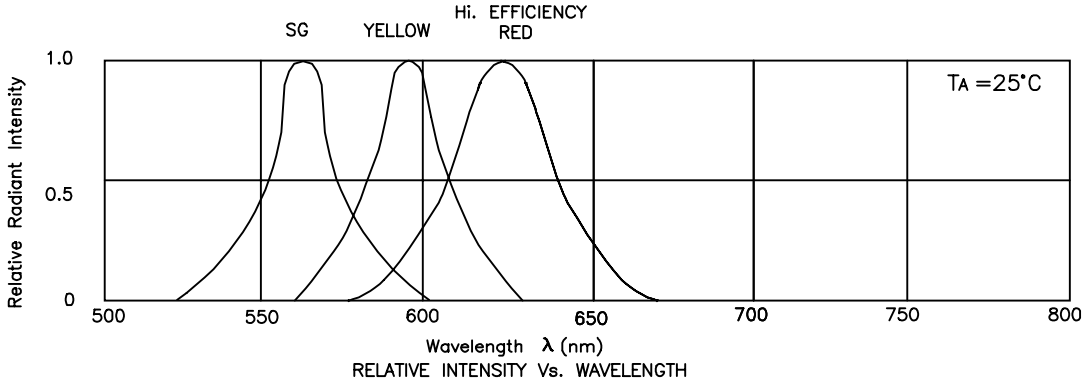
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Super Bright Green Yellow	625 565 590		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	High Efficiency Red Super Bright Green Yellow	45 30 35		nm	IF=20mA
C	Capacitance	High Efficiency Red Super Bright Green Yellow	12 45 10		pF	VF=0V;f=1MHz
V_F	Forward Voltage	High Efficiency Red Super Bright Green Yellow	2.0 2.2 2.1	2.5 2.5 2.5	V	IF=20mA
I_R	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

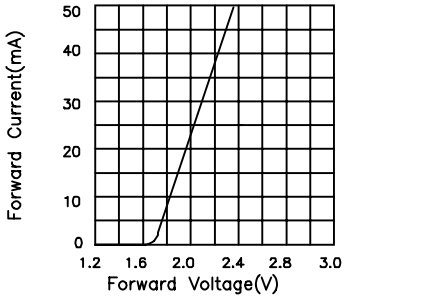
Parameter	High Efficiency Red	Super Bright Green	Yellow	Units
Power dissipation	105	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	150	150	150	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			
Lead Soldering Temperature [2]	260°C For 5 Seconds			

Notes:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.

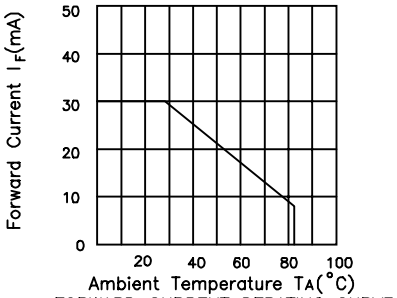


RELATIVE INTENSITY Vs. WAVELENGTH

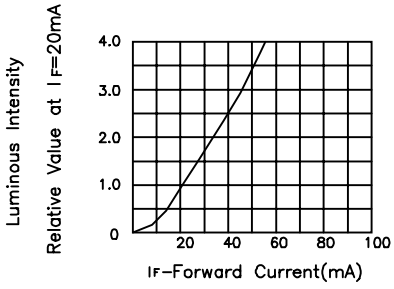
High Efficiency Red AM2520ID04,AM2520EC04

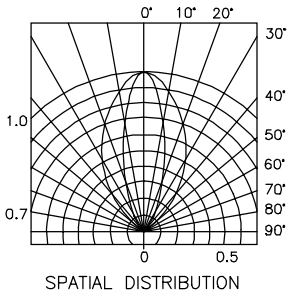


FORWARD CURRENT Vs. FORWARD VOLTAGE



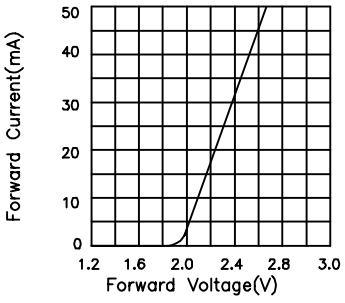
FORWARD CURRENT DERATING CURVE



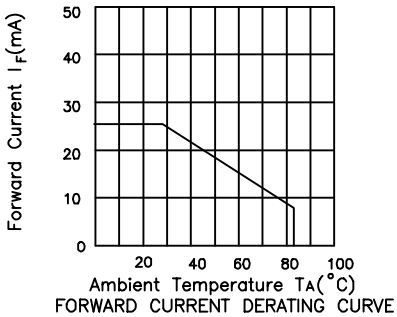


SPATIAL DISTRIBUTION

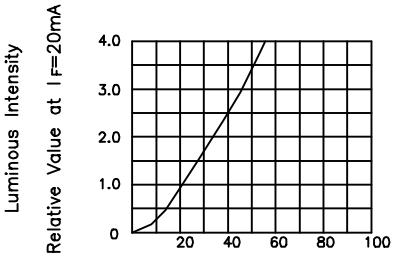
Super Bright Green AM2520SGD04,AM2520SGC04



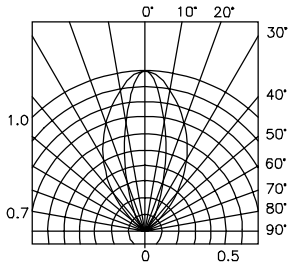
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

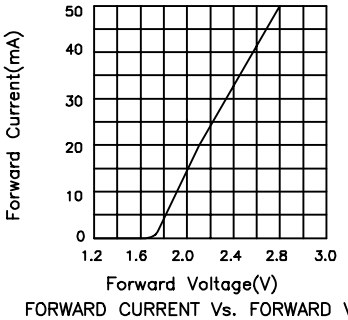


LUMINOUS INTENSITY Vs. FORWARD CURRENT

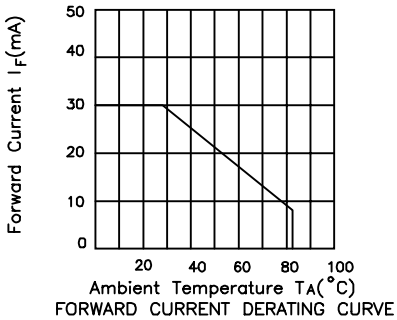


SPATIAL DISTRIBUTION

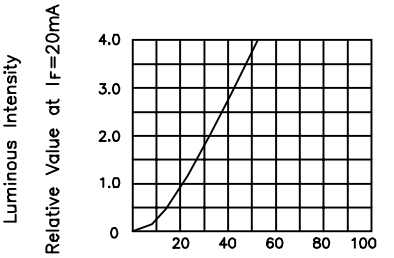
Yellow AM2520YD04,AM2520YC04



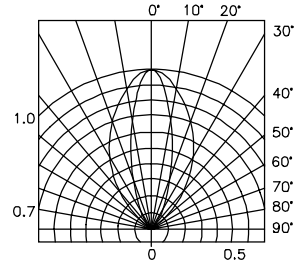
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION