

AM24ID03	AM24EC03
AM24SGD03	AM24SGC03
AM24YD03	AM24YC03

Features

- SUBMINIATURE PACKAGE.
- WIDE VIEWING ANGLE.
- GULL WING.
- LONG LIFE SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.

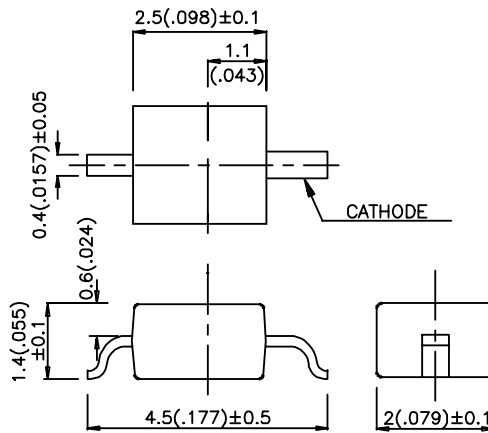
Description

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 $\pm 0.25(0.01")$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	θ1/2
AM24ID03	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	15	140°
AM24EC03	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	8	15	140°
AM24SGD03	SUPER BRIGHT GREEN (GaP)	GREEN DIFFUSED	3	10	140°
AM24SGC03	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	3	10	140°
AM24YD03	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	3	10	140°
AM24YC03	YELLOW (GaAsP/GaP)	WATER CLEAR	3	10	140°

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

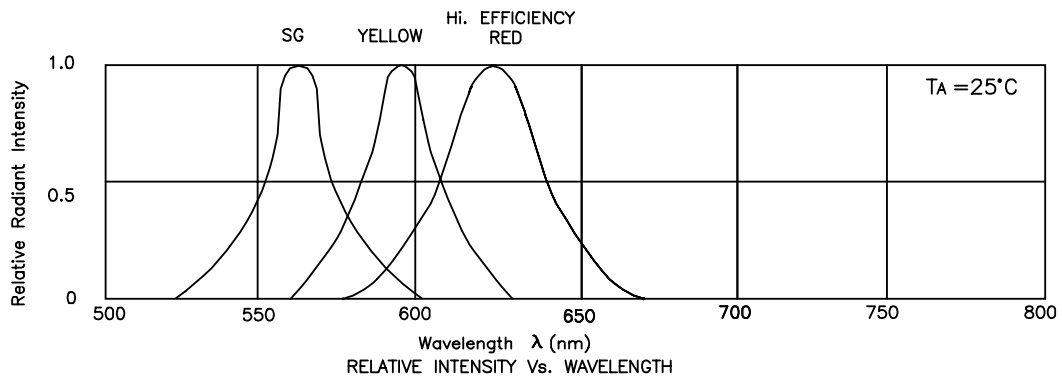
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red Super Bright Green Yellow	625 565 590		nm	IF=20mA
Δλ _{1/2}	Spectral Line Halfwidth	High Efficiency Red Super Bright Green Yellow	45 30 35		nm	IF=20mA
C	Capacitance	High Efficiency Red Super Bright Green 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

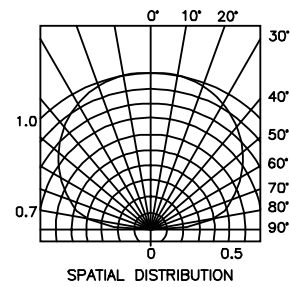
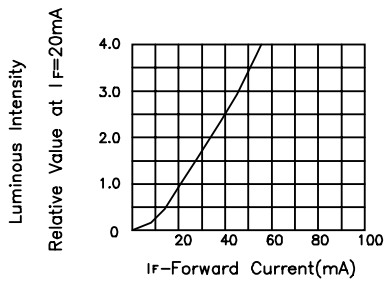
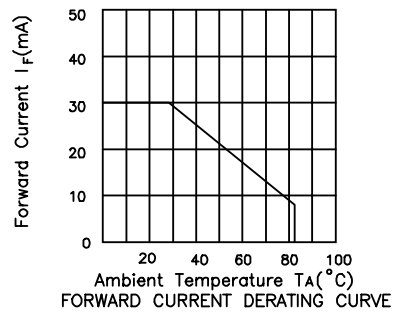
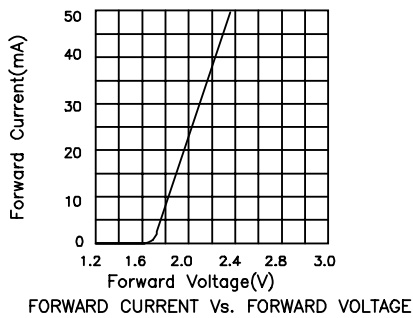
Parameter	High Efficiency Red	Super Bright Green	Yellow	Units
Power dissipation	105	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	150	150	150	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			

Note:

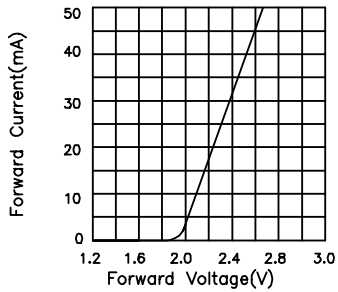
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



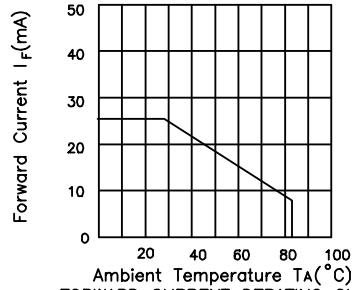
High Efficiency Red AM24ID03, AM24EC03



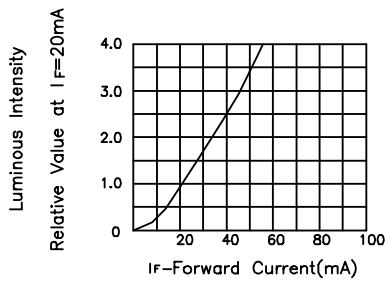
Super Bright Green AM24SGD03,AM24SGC03



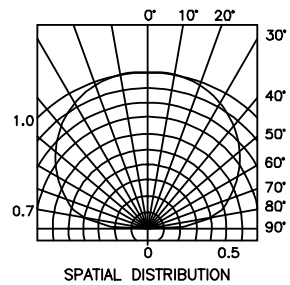
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

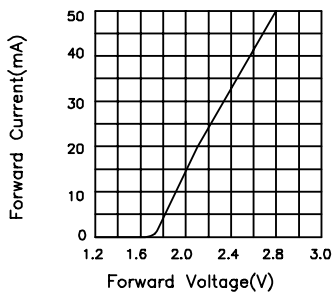


LUMINOUS INTENSITY Vs. FORWARD CURRENT

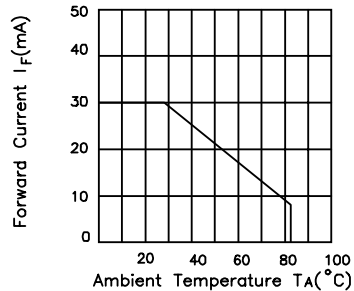


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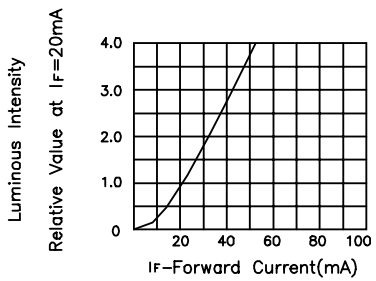
Yellow AM24YD03,AM24YC03



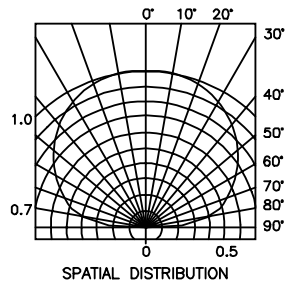
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

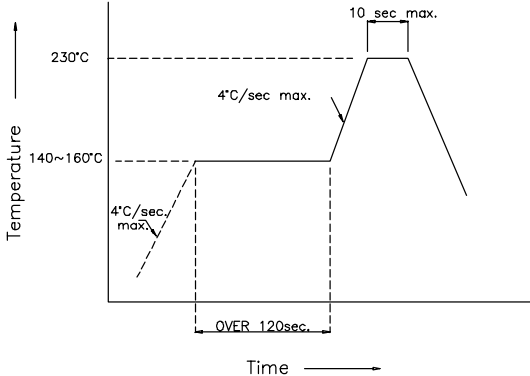


LUMINOUS INTENSITY Vs. FORWARD CURRENT

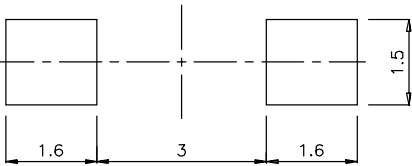


SPATIAL DISTRIBUTION

AM24xxx03 SERIES SMT Reflow Soldering Instructions



AM24xxx03 SERIES Recommended Soldering Pattern (Units : mm)



AM24xxx03 SERIES Tape Specifications (Units : mm)

