

KM2520ID03	HIGH EFFICIENCY RED
KM2520EC03	HIGH EFFICIENCY RED
KM2520SGD03	SUPER BRIGHT GREEN
KM2520SGC03	SUPER BRIGHT GREEN
KM2520YD03	YELLOW
KM2520YC03	YELLOW

### Features

- SUBMINIATURE PACKAGE.
- WIDE VIEWING ANGLE.
- GULL WING.
- LONG LIFE - SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- PACKAGE : 1000PCS / REEL.

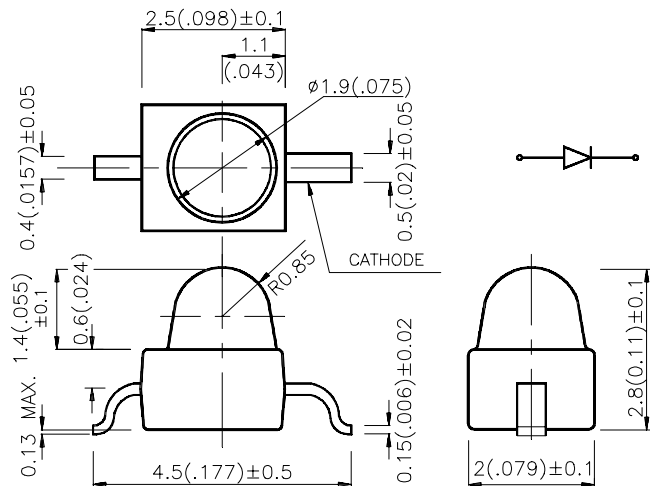
### Description

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 subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	θ1/2
KM2520ID03	HIGH EFFICIENCY RED(GaAsP/GaP)	RED DIFFUSED	8	30	40°
KM2520EC03	HIGH EFFICIENCY RED(GaAsP/GaP)	WATER CLEAR	12	70	20°
KM2520SGD03	SUPER BRIGHT GREEN (GaP)	GREEN DIFFUSED	3	10	40°
KM2520SGC03	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	40	100	20°
KM2520YD03	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	3	10	40°
KM2520YC03	YELLOW (GaAsP/GaP)	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<sub>A</sub>=25°C

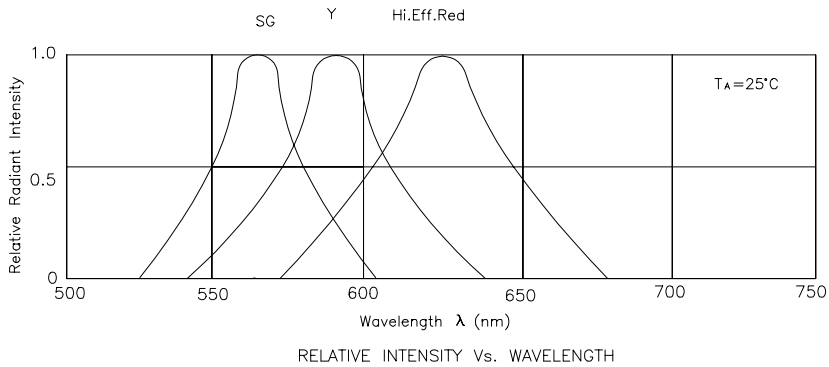
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red Super Bright Green Yellow	627 565 590		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	High Efficiency Red Super Bright Green Yellow	625 568 588		nm	IF=20mA
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	High Efficiency Red Super Bright Green Yellow	45 30 35		nm	IF=20mA
C	Capacitance	High Efficiency Red Super Bright Green Yellow	15 15 20		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	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 <sub>R</sub>	Reverse Current	All		10	μA	V <sub>R</sub> = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

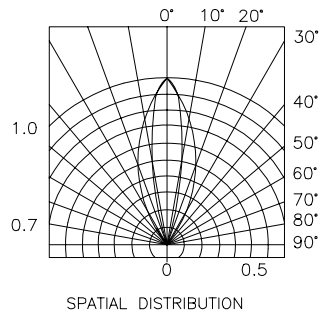
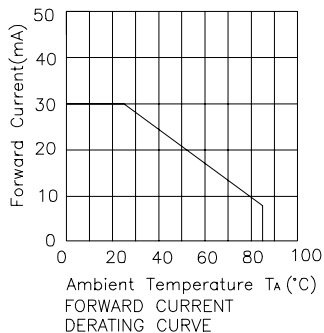
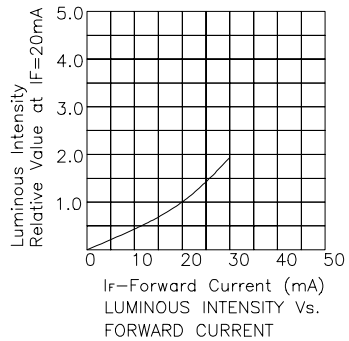
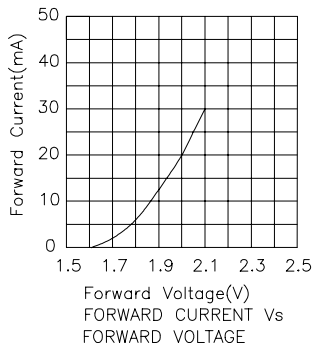
Parameter	High Efficiency Red	Super Bright Green	Yellow	Units
Power dissipation	105	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	160	140	140	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			

Note:

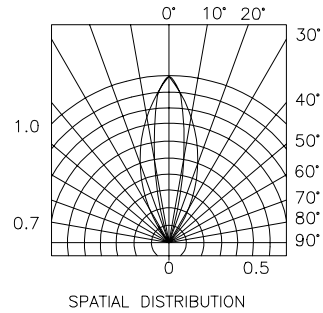
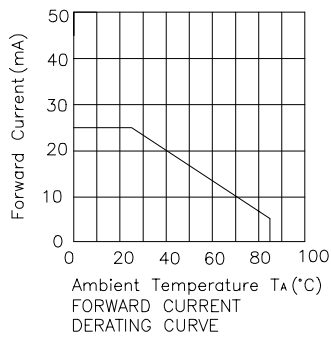
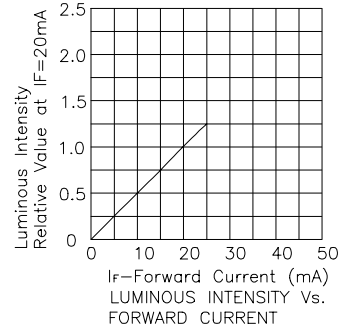
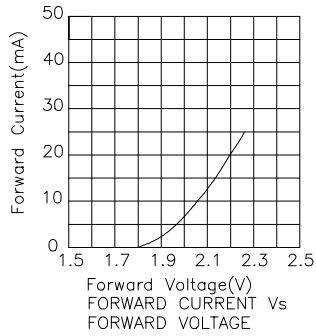
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



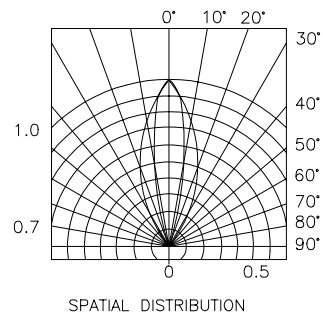
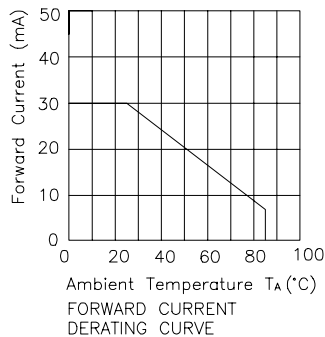
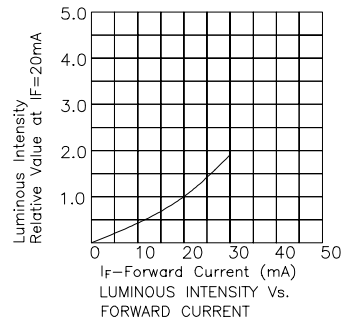
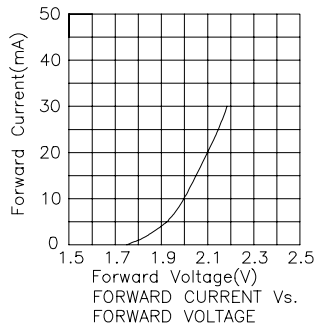
## High Efficiency Red KM2520ID03, KM2520EC03



## Super Bright Green KM2520SGD03, KM2520SGC03

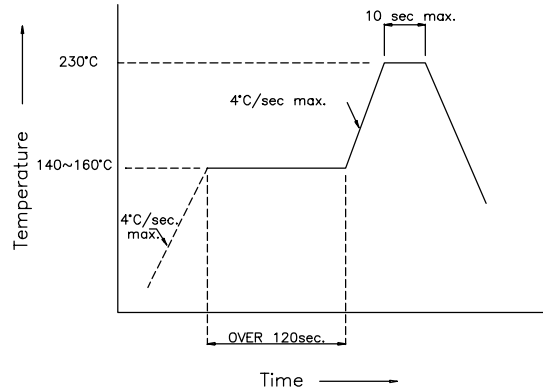


## Yellow KM2520YD03, KM2520YC03

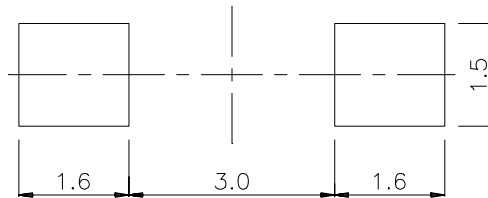


## KM2520xx03 SMT Reflow Soldering Instructions

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)

