

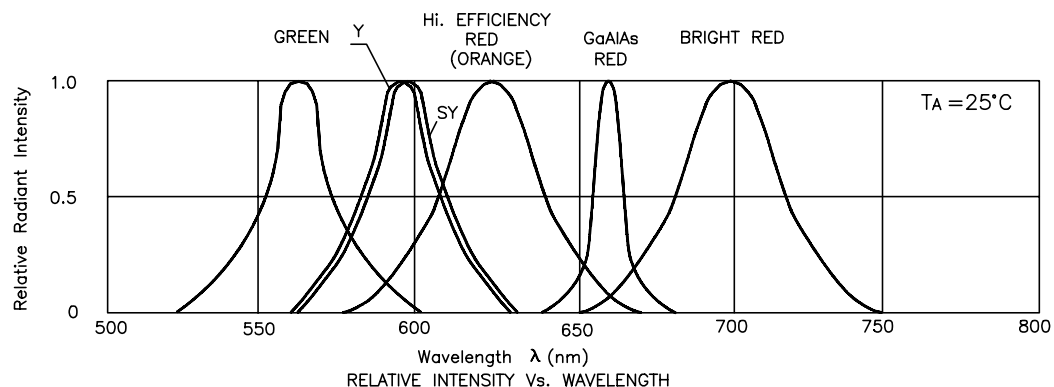
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Bright Red High Efficiency Red Yellow Super Bright Red Super Bright Green Super Bright Yellow	700 625 590 660 565 595		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Bright Red High Efficiency Red Yellow Super Bright Red Super Bright Green Super Bright Yellow	45 45 35 20 30 20		nm	IF=20mA
C	Capacitance	Bright Red High Efficiency Red Yellow Super Bright Red Super Bright Green Super Bright Yellow	40 12 10 95 45 33		pF	VF=0V;f=1MHz
V _F	Forward Voltage	Bright Red High Efficiency Red Yellow Super Bright Red Super Bright Green Super Bright Yellow	2.0 2.0 2.1 1.85 2.2 2.0	2.5 2.5 2.5 2.5 2.5 2.4	V	IF=20mA
I _R	Reverse Current	All	10		uA	VR = 5V

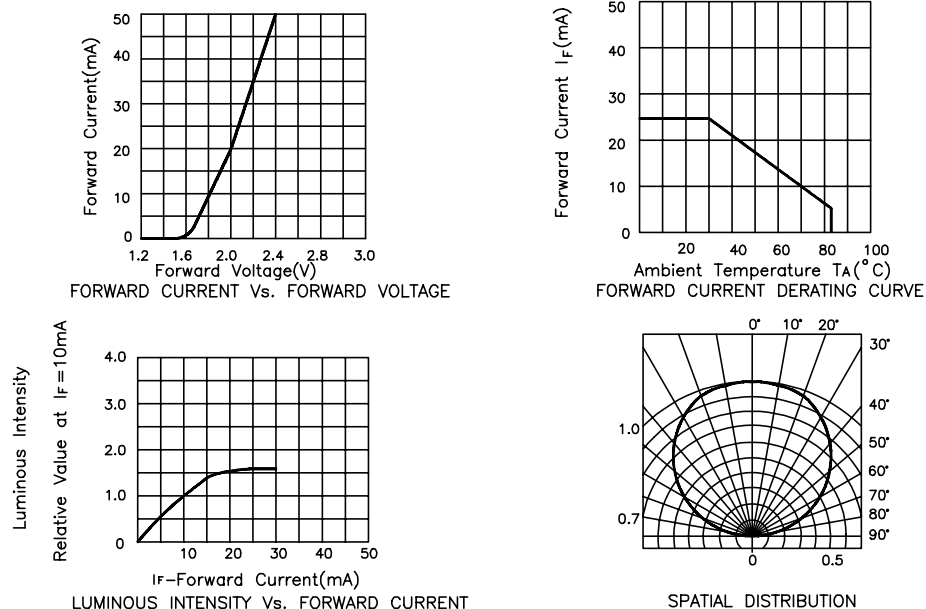
Absolute Maximum Ratings at T_A=25°C

Parameter	Bright Red	High Efficiency Red	Yellow	Super Bright Red	Super Bright Green	Super Bright Yellow	Units
Power dissipation	105	105	105	100	105	125	mW
DC Forward Current	25	30	30	30	25	30	mA
Peak Forward Current [1]	150	150	150	150	150	150	mA
Reverse Voltage	5	5	5	5	5	5	V
Operating/Storage Temperature	-40 °C To +85 °C						

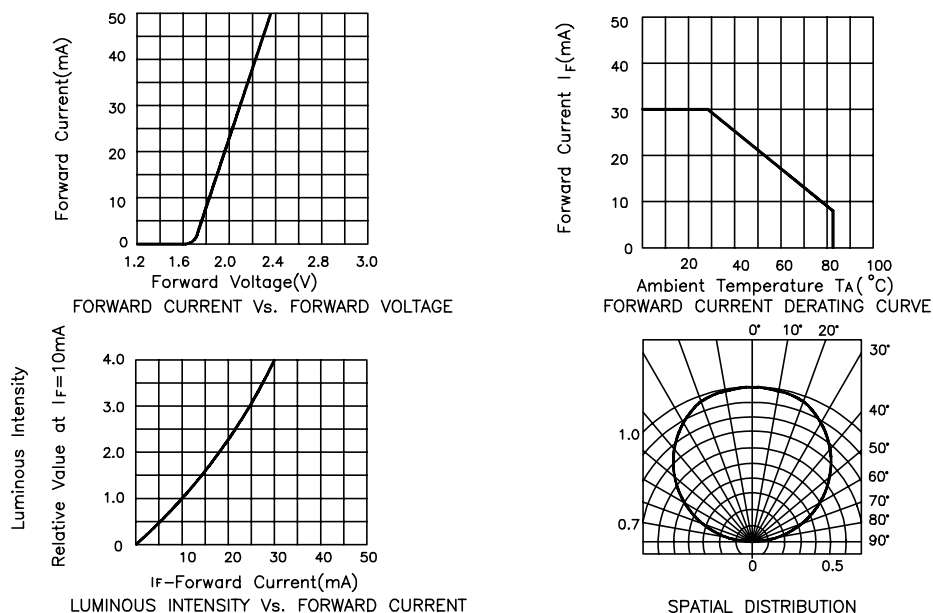
Note:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



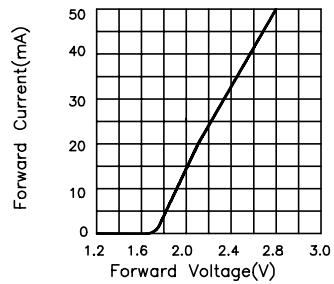
Bright Red KP-2012HD, KP-2012HC, KP-2012HT



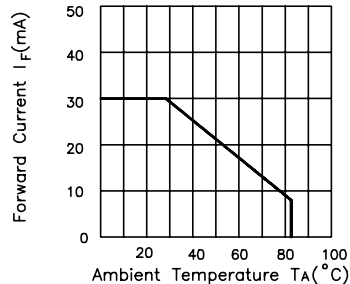
High Efficiency Red KP-2012ID, KP-2012EC, KP-2012IT



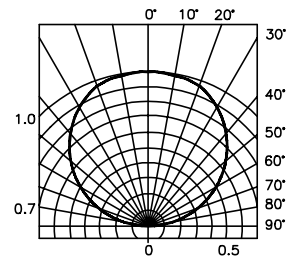
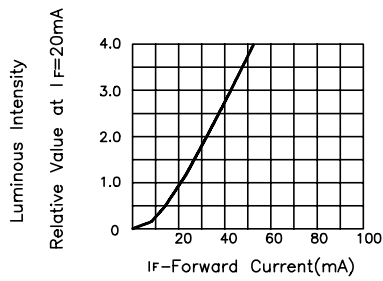
Yellow KP-2012YD, KP-2012YC, KP-2012YT



FORWARD CURRENT Vs. FORWARD VOLTAGE

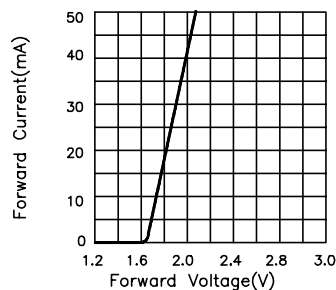


FORWARD CURRENT DERATING CURVE

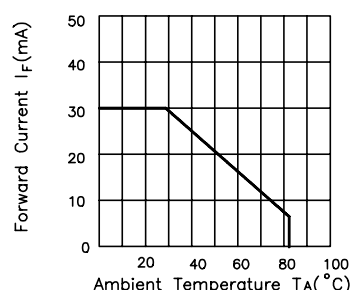


SPATIAL DISTRIBUTION

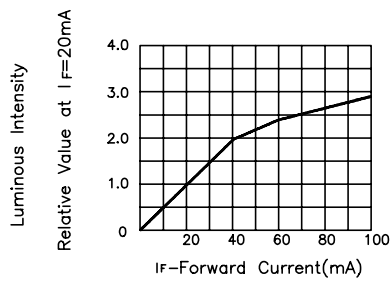
Super Bright Red KP-2012SRD, KP-2012SRC, KP-2012SRT



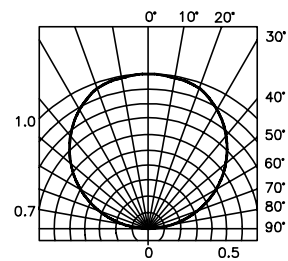
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

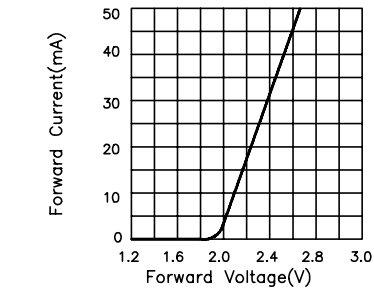


LUMINOUS INTENSITY Vs. FORWARD CURRENT

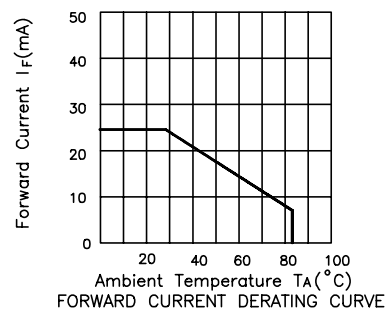


SPATIAL DISTRIBUTION

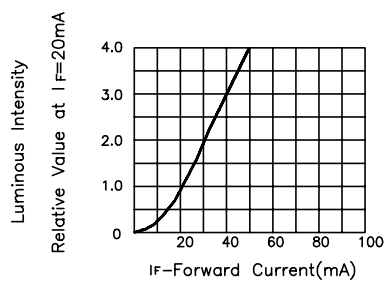
Super Bright Green KP-2012SGD, KP-2012SGC, KP-2012SGT



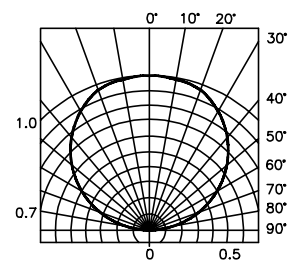
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

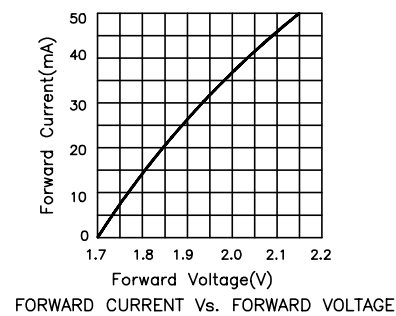


LUMINOUS INTENSITY Vs. FORWARD CURRENT

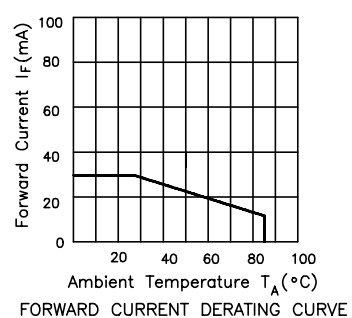


SPATIAL DISTRIBUTION

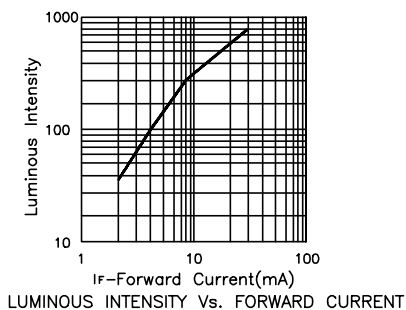
Super Bright Yellow KP-2012SYD, KP-2012SYC, KP-2012SYT



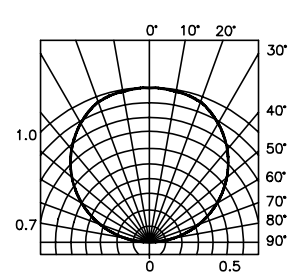
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

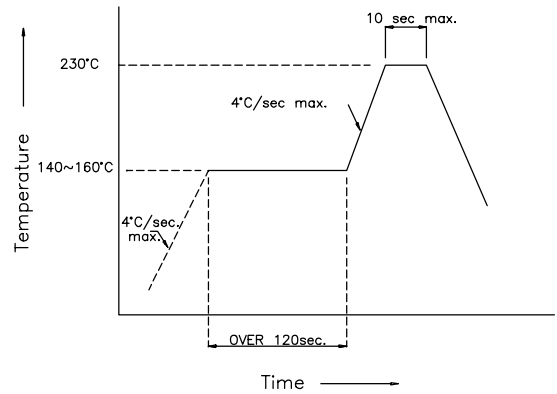


LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION

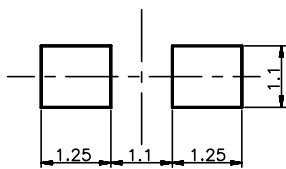
KP-2012 Series SMT Reflow Soldering Instructions



KP-2012 Series Recommended Soldering Pattern

FOR REFLOW SOLDERING

(Units : mm)



KP-2012 Series Tape Specifications

