Surface Mount LEDs

Order code	Manufacturer code	Description
72-8680	KA-2734SRSGC	RED/GRN BI-COL.SMT
72-8685	KA-2734SRSGC.	RL 1000 RED/GRN BI-COL.SMT LED

Sales: 01206 751166 **Technical: 01206 835555** **Fax: 01206 7551188**
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Kingbright®

2.7x3.4mm SURFACE MOUNT LED LAMPS

KA-2734ESGC

KA-2734SRSGC

1

Features

- ●2.7mm X 3.4mm SMT LED. 1.5mm HEIGHT ONLY.
- ●BOTH CHIPS CAN BE CONTROLLED SEPARATELY.
- ●SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- ●AVAILABLE ON TAPE AND REEL.
- ●IDEAL FOR BACKLIGHTING.

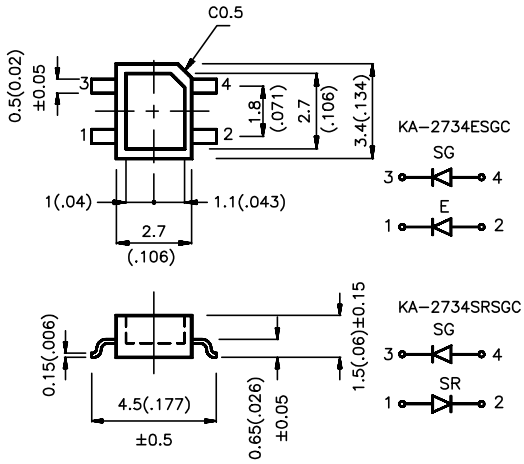
Description

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

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

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diodes.

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.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Max.	**2q1/2**
KA-2734ESGC	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	8	50	120°
	SUPER BRIGHT GREEN (GaP)		8	50	120°
KA-2734SRSGC	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	8	200	120°
	SUPER BRIGHT GREEN (GaP)		8	50	120°

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

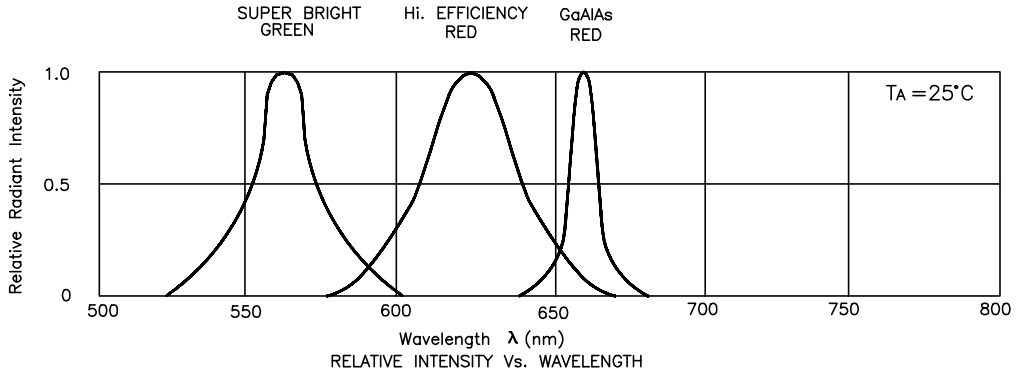
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Super Bright Red Super Bright Green	625 660 565		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	High Efficiency Red Super Bright Red Super Bright Green	45 20 30		nm	IF=20mA
C	Capacitance	High Efficiency Red Super Bright Red Super Bright Green	12 95 45		pF	VF=0V;f=1MHz
V_F	Forward Voltage	High Efficiency Red Super Bright Red Super Bright Green	2.0 1.85 2.2	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

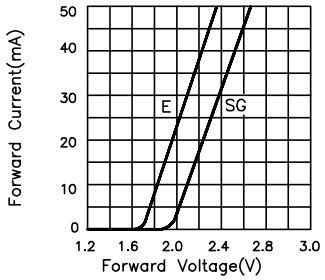
Parameter	High Efficiency Red	Super Bright Red	Super Bright Green	Units
Power dissipation	105	100	105	mW
DC Forward Current	30	30	25	mA
Peak Forward Current [1]	150	150	150	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40° C To +85 ° C			

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

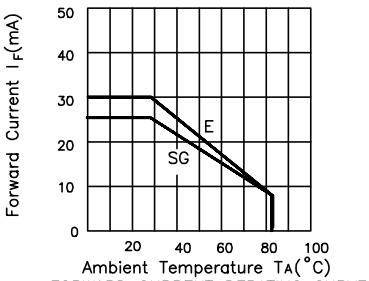


RELATIVE INTENSITY Vs. WAVELENGTH

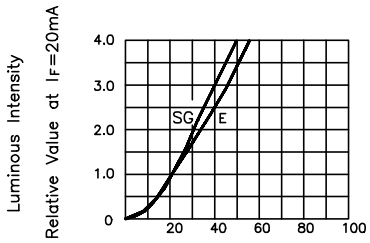
High Efficiency Red / Super Bright Green KA-2734ESGC



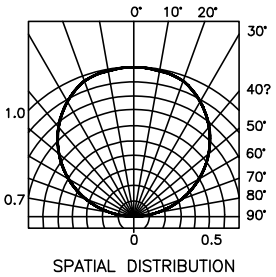
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

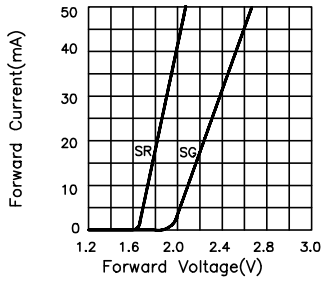


LUMINOUS INTENSITY Vs. FORWARD CURRENT

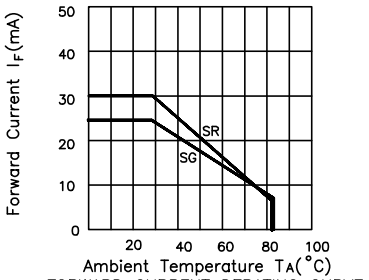


SPATIAL DISTRIBUTION

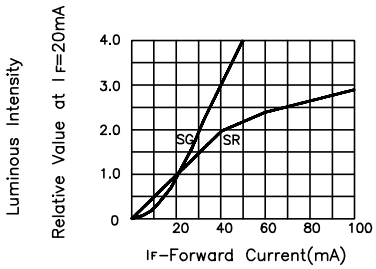
Super Bright Red / Super Bright Green KA-2734SRSGC



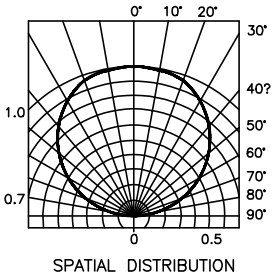
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

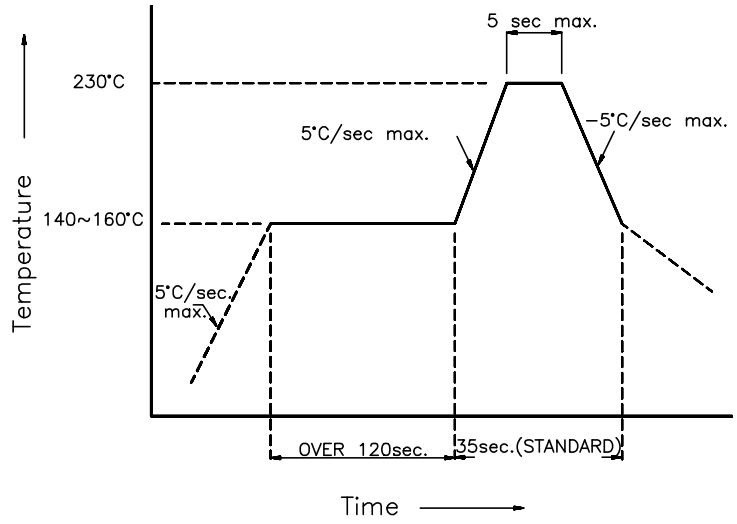


LUMINOUS INTENSITY Vs. FORWARD CURRENT



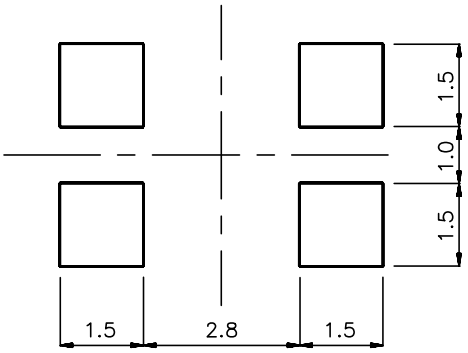
SPATIAL DISTRIBUTION

KA-2734 Series SMT Reflow Soldering Instructions



KA-2734 Series Recommended Soldering Pattern
(Units : mm)

FOR REFLOW SOLDERING



KA-2734 Series Tape Specifications

(Units : mm)