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9.2mmX1.9mm BACKLIGHT
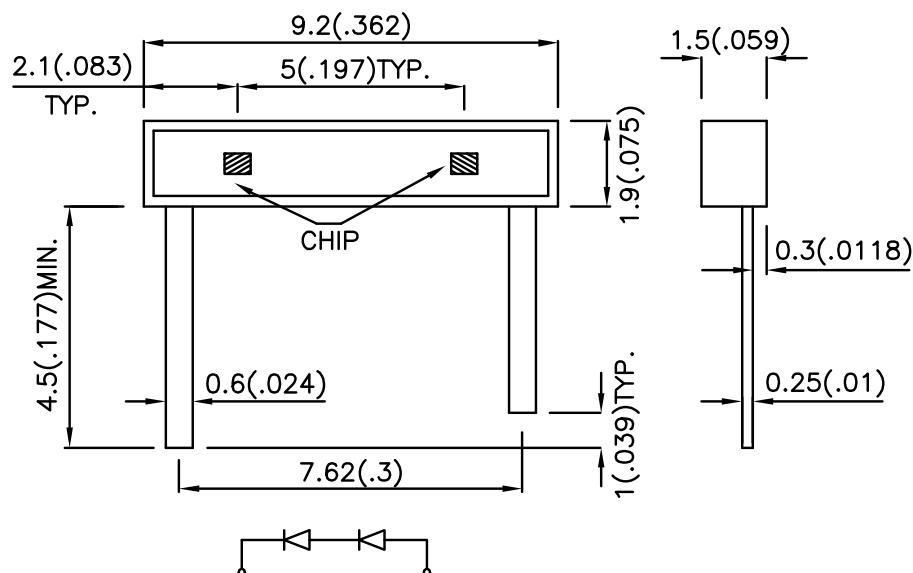
KA-9219/2SRC   SUPER BRIGHT RED

Features

●LOW POWER CONSUMPTION.

●IDEAL FOR BACKLIGHTING.

●RoHS COMPLIANT.

Description

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red 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 leads emerge from the package.
4. Specifications are subject to change without notice.

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
KA-9219/2SRC	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	70	200	100°

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
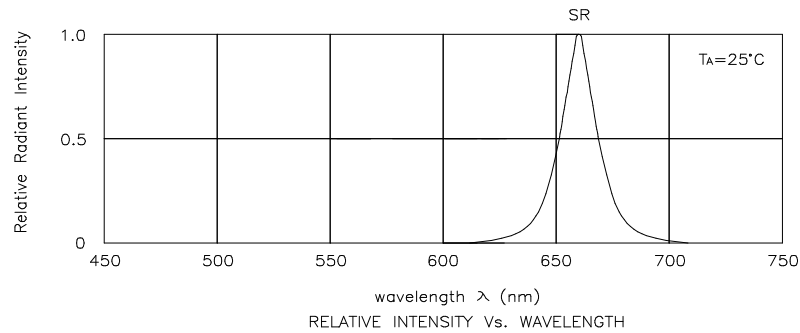
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda peak$	Peak Wavelength	Super Bright Red	660		nm	I_F=20mA
λD	Dominant Wavelength	Super Bright Red	640		nm	I_F=20mA
$\Delta\lambda 1/2$	Spectral Line Half-width	Super Bright Red	20		nm	I_F=20mA
C	Capacitance	Super Bright Red	45		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Super Bright Red	3.7	5	V	I_F=20mA
I_R	Reverse Current	Super Bright Red		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

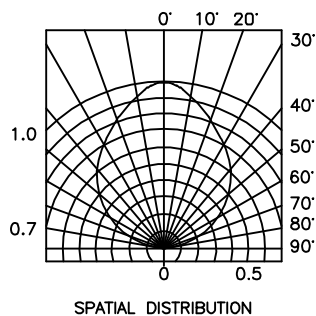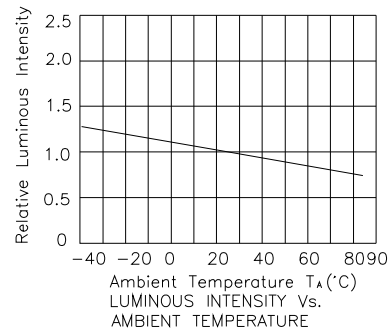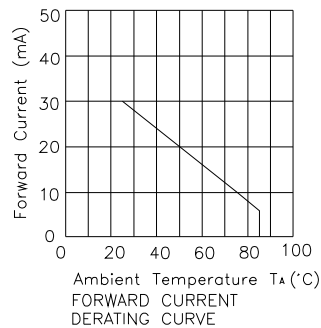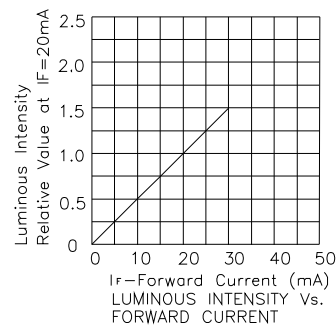| Parameter	Super Bright Red	Units
Power dissipation	150	mW
DC Forward Current	30	mA
Peak Forward Current [1]	155	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

Notes:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.

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SR

$T_A=25°C$

Relative Radiant Intensity

1.0

0.5

0

450   500   550   600   650   700   750

wavelength λ (nm)

RELATIVE INTENSITY Vs. WAVELENGTH

Super Bright Red   **KA-9219/2SRC**

Forward Current(mA)

3.0 3.4 3.8 4.2 4.6 6.0

Forward Voltage(V)

FORWARD CURRENT Vs.
FORWARD VOLTAGE

Luminous Intensity
Relative Value at IF=20mA

0   10   20   30   40   50

IF−Forward Current (mA)

LUMINOUS INTENSITY Vs.
FORWARD CURRENT

Forward Current (mA)

0   20   40   60   80 100

Ambient Temperature TA(°C)

FORWARD CURRENT
DERATING CURVE

Relative Luminous Intensity

−40 −20 0   20   40   60   8090

Ambient Temperature TA(°C)

LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

0° 10° 20°   30°

40°

50°

60°

70°

1.0   80°

0.7   90°

0   0.5

SPATIAL DISTRIBUTION

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength),
 the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm

2. Luminous Intensity: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.