

WP138A8QMP/SRD/TG

SUPER BRIGHT RED

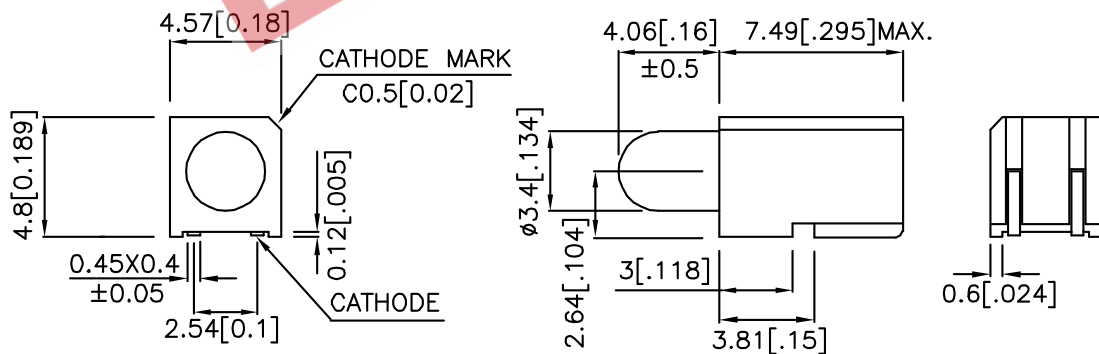
Features

- PRE-TRIMMED LEADS FOR PC MOUNTING.
- CAN BE ASSEMBLED WITH EACH OTHER.
- I.C.COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- HOUSING MATERIAL:PPA.
- PACKAGE:1000PCS / REEL.
- HIGH TEMPERATURE RESISTANT HOUSING.
- HIGH GLASS TRANSITION TEMPERATURE EPOXY.
- 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. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
WP138A8QMP/SRD/TG	SUPER BRIGHT RED (GaAlAs)	RED DIFFUSED	110	250	60°

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 TA=25°C

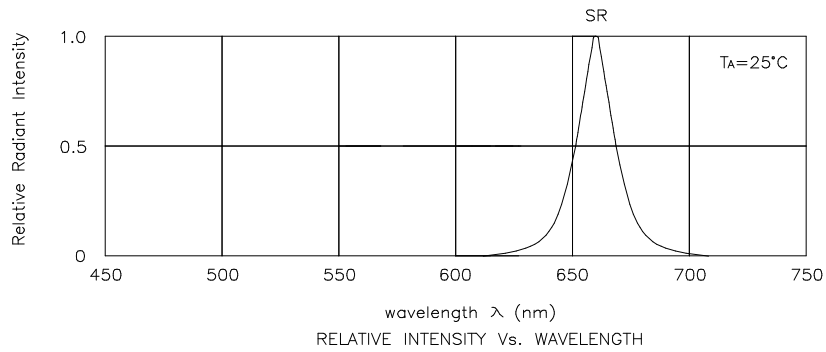
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	660		nm	IF=20mA
λD	Dominant Wavelength	Super Bright Red	640		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	IF=20mA
C	Capacitance	Super Bright Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Red	1.85	2.5	V	IF=20mA
IR	Reverse Current	Super Bright Red		10	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Red	Units
Power dissipation	100	mW
DC Forward Current	30	mA
Peak Forward Current [1]	155	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

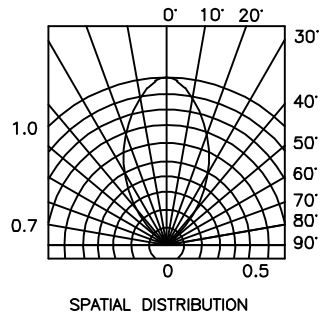
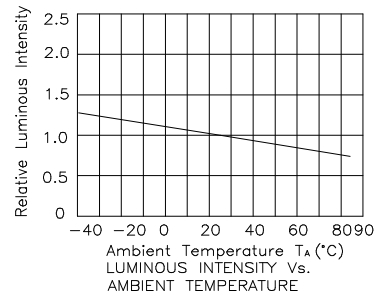
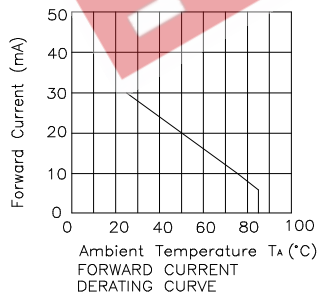
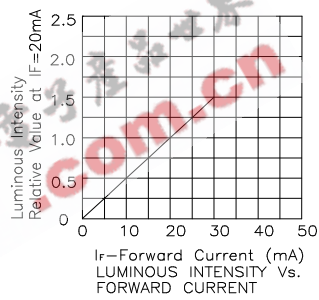
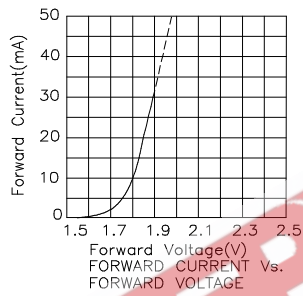
Note:

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



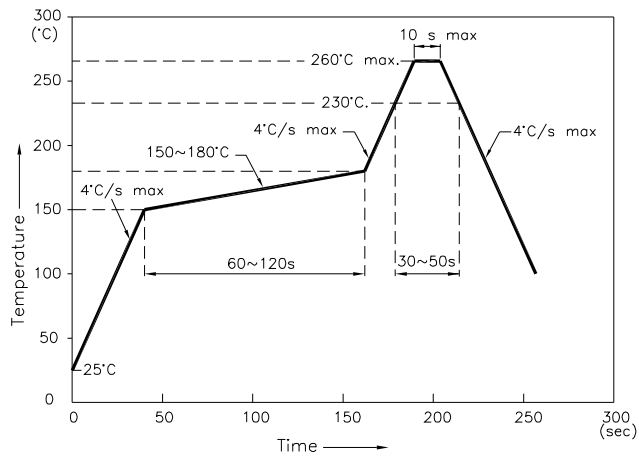
Super Bright Red

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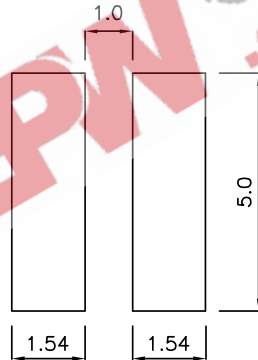
Reflow Soldering Profile For Lead-free SMT Process.



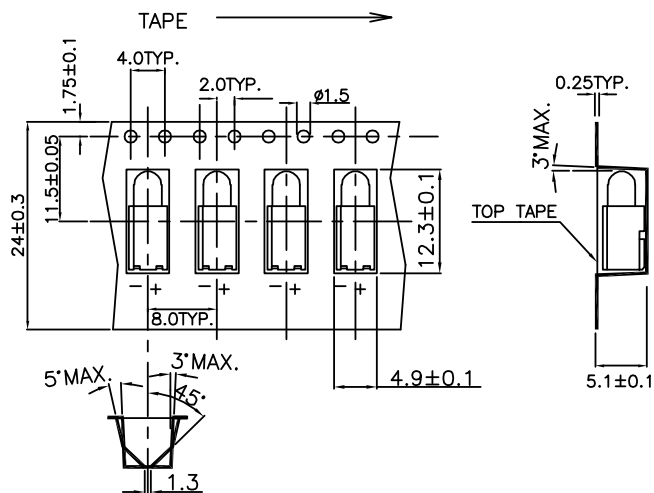
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units : mm)

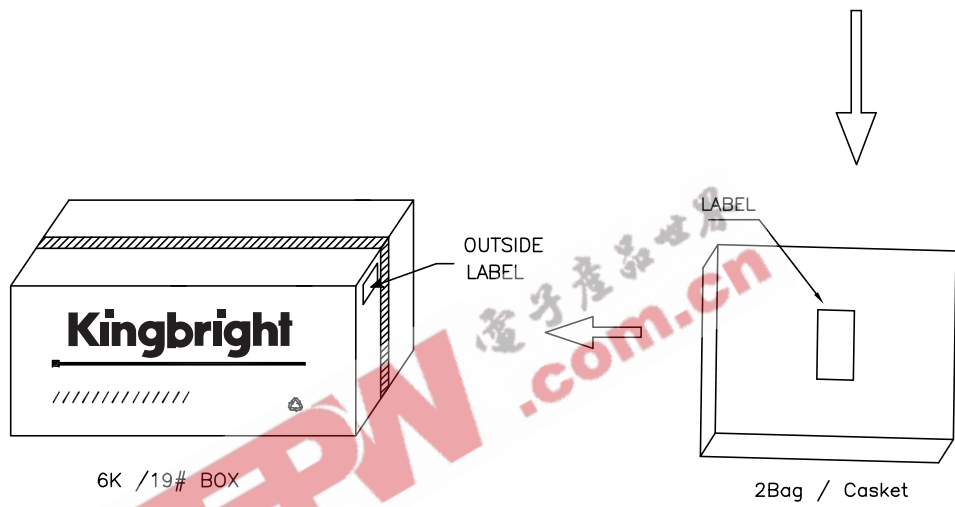
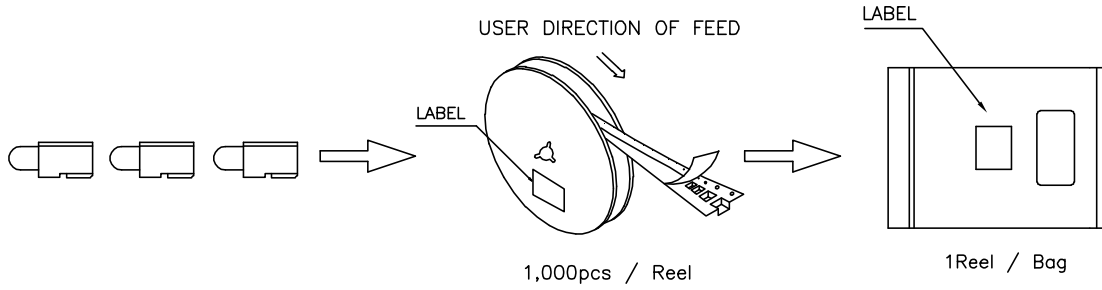


Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

WP138A8QMP/SRD/TG



<h2 style="margin: 0;">Kingbright</h2>				
Q.C.	<table border="1" style="margin: 0 auto; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 2px;">QC</td> </tr> <tr> <td style="text-align: center; padding: 2px;">xx xx: xxxx</td> </tr> <tr> <td style="text-align: center; padding: 2px;">PASSED</td> </tr> </table>	QC	xx xx: xxxx	PASSED
QC				
xx xx: xxxx				
PASSED				
TYPE NO :	WP138A8QMP/xxx			
QUANTITY :	2,000 pcs			
S/N :	XXX			
CODE:	XXX			
LOT NO:				
MADE IN CHINA	RoHS Compliant			

Date

Remarks:

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

1. Wavelength: +/-1nm
2. Luminous intensity/ luminous flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.