SOT-23 SURFACE MOUNT LED LAMP

Part Number: KM-23LSRD-F

Super Bright Red

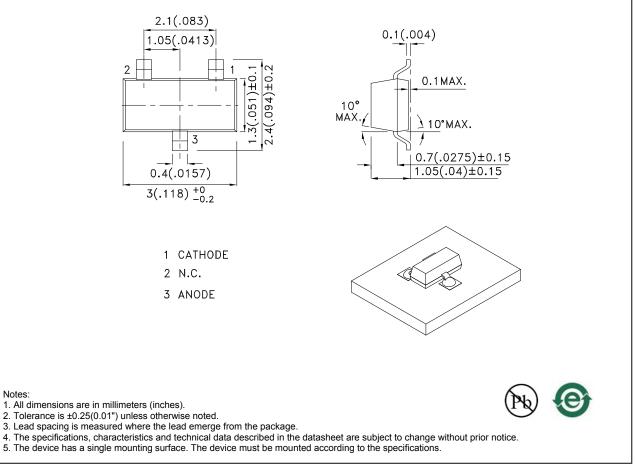
Features

- SOT-23 package surface mount LED lamp.
- Low power consumption.
- Long life solid state reliability.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- RoHS compliant.

Description

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

Package Dimensions



SPEC NO: DSAG6676 APPROVED: WYNEC REV NO: V.3A CHECKED: Allen Liu DATE: OCT/15/2014 DRAWN: P.Cheng PAGE: 1 OF 5 ERP: 1202000031

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Selection Guide					
Part No.	Dice	Lens Type	lv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Тур.	201/2
KM-23LSRD-F	Super Dright Ded (CoAlAo)	Red Diffused	4	8	140°
	Super Bright Red (GaAlAs)		*1.2	*4	

Notes: 1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value. 2. Luminous intensity/ luminous Flux: +/-15%. *Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	655		nm	I⊧=2mA
λD [1]	Dominant Wavelength	Super Bright Red	640		nm	I⊧=2mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	I⊧=2mA
С	Capacitance	Super Bright Red	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Red	1.65	2.5	V	I⊧=2mA
lr	Reverse Current	Super Bright Red		10	uA	VR = 5V

Notes:

Wavelength: +/-1nm.
Forward Voltage: +/-0.1V.
Wavelength value is traceable to the CIE127-2007 compliant national standards.

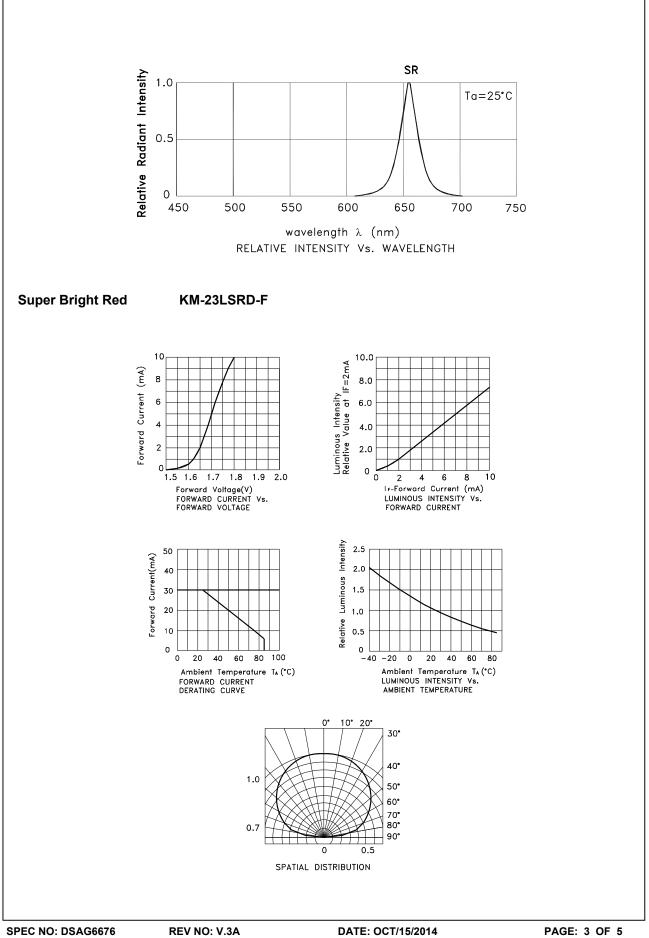
4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Red	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	155	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

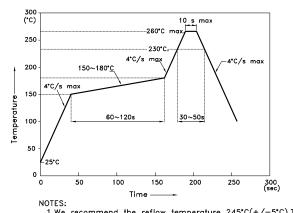
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



KM-23LSRD-F

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

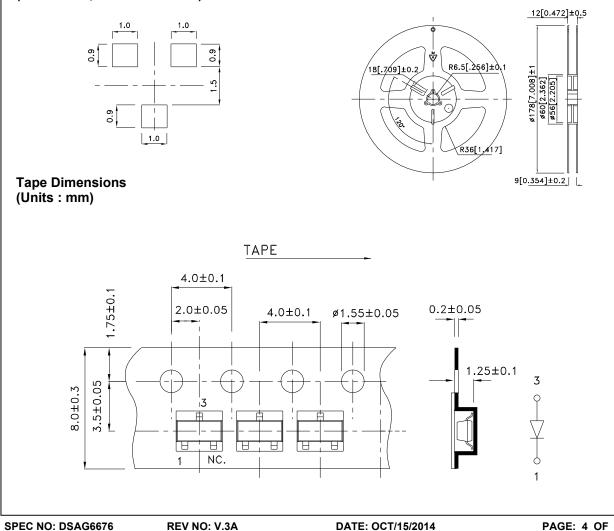
Reflow Soldering Profile For Lead-free SMT Process.



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; Tolerance: ± 0.1)

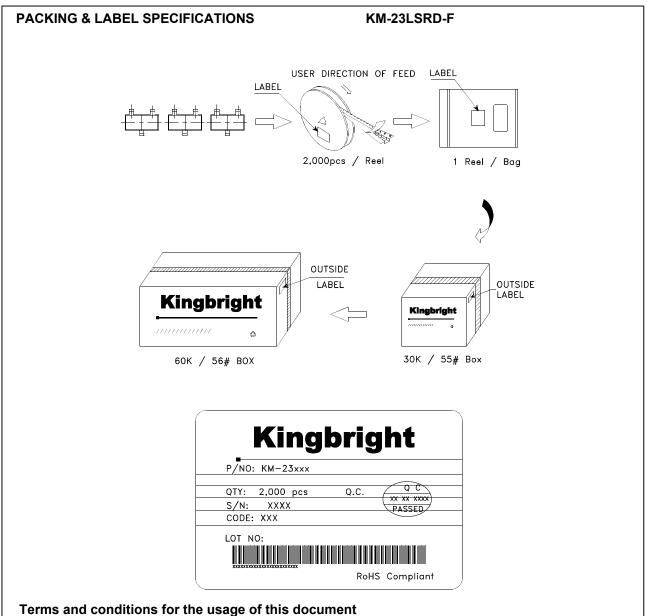
Reel Dimension



CHECKED: Allen Liu

DRAWN: P.Cheng

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