SOT-23 SURFACE MOUNT LED LAMP

Part Number: KM-23ID-F

High Efficiency Red

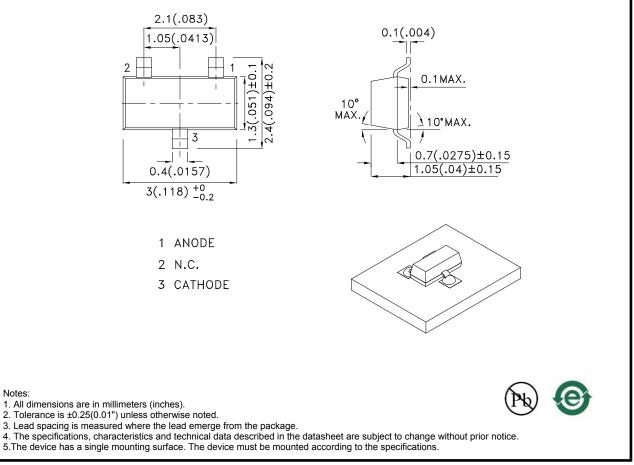
Features

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

Description

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

Package Dimensions



SPEC NO: DSAA4561 **APPROVED: WYNEC**

Notes:

REV NO: V.13 CHECKED: Allen Liu

DATE: MAY/03/2010 **DRAWN: XULINA**

PAGE: 1 OF 5 ERP: 1202000019

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
KM-23ID-F	High Efficiency Red (GaAsP/GaP)	RED DIFFUSED	4	12	140°

Notes:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.

2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	I⊧=20mA
λD [1]	Dominant Wavelength	High Efficiency Red	625		nm	I⊧=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	IF=20mA
С	Capacitance	High Efficiency Red	15		pF	V⊧=0V;f=1MHz
Vf [2]	Forward Voltage	High Efficiency Red	2	2.5	V	I⊧=20mA
lr	Reverse Current	High Efficiency Red		10	uA	VR=5V

Notes:

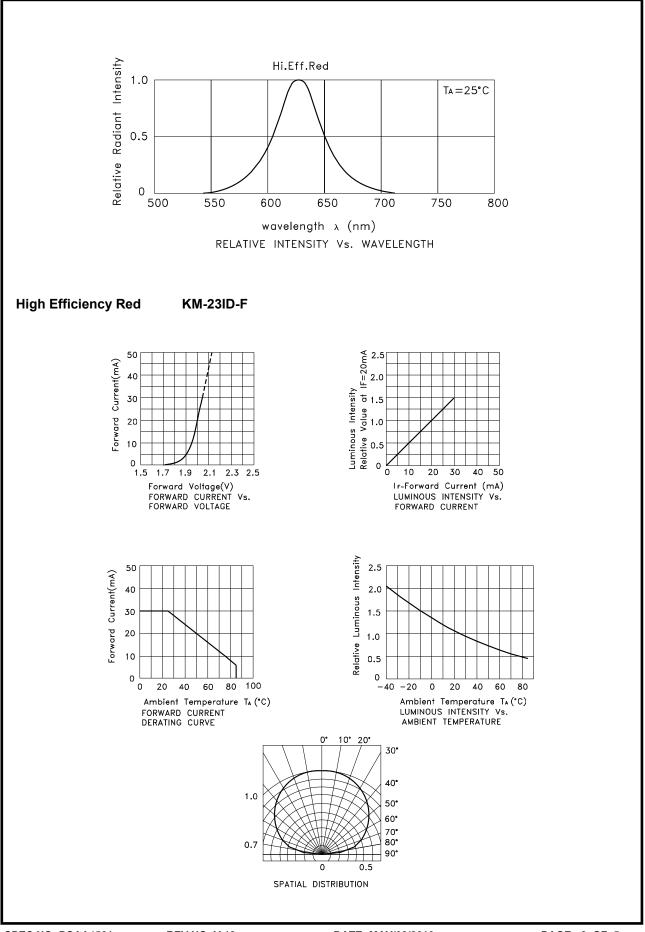
1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	160	mA	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

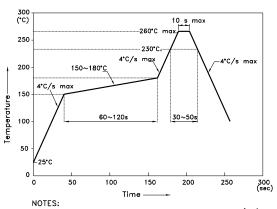
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



KM-23ID-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.

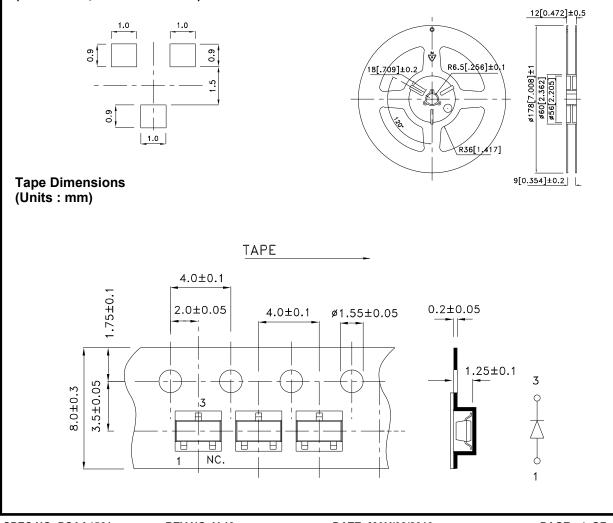
Reflow Soldering Profile For Lead-free SMT Process.



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



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PAGE: 4 OF 5 ERP: 1202000019

