

Kingbright

T-1 3/4 (5mm) SOLID STATE LAMP

PRELIMINARY SPEC

P/N: WP7083ID

HIGH EFFICIENCY RED

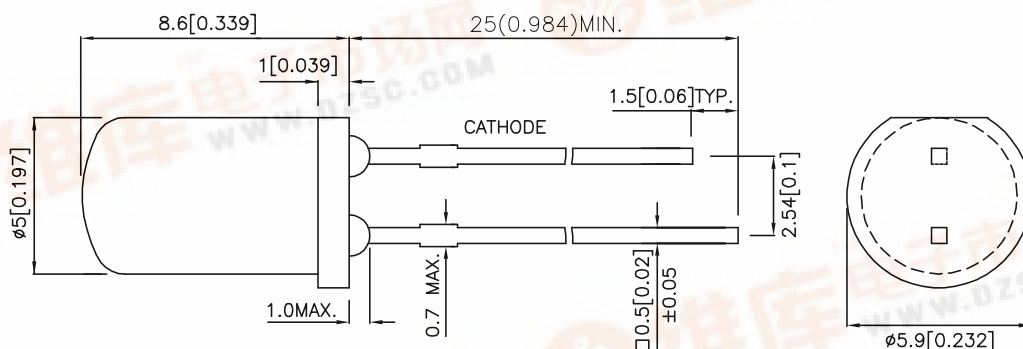
Features

- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- I.C. COMPATIBLE.
- 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



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 10mA		Viewing Angle [1]
			Min.	Typ.	2 θ 1/2
WP7083ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	25	60°

Notes:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous Intensity/ Luminous Flux: +/-15%.

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red	627		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	High Efficiency Red	625		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red	45		nm	I _F =20mA
C	Capacitance	High Efficiency Red	15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	High Efficiency Red	2.0	2.5	V	I _F =20mA
I _R	Reverse Current	High Efficiency Red		10	uA	V _R = 5V

Notes:

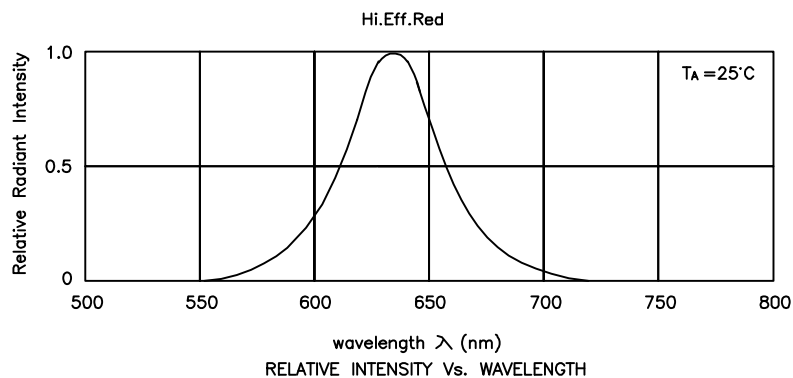
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at T_A=25°C

Parameter	High Efficiency Red	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	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	

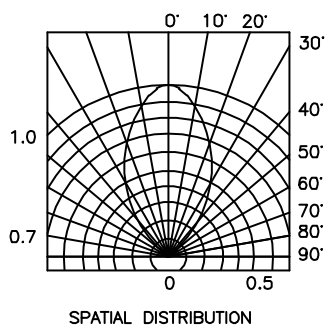
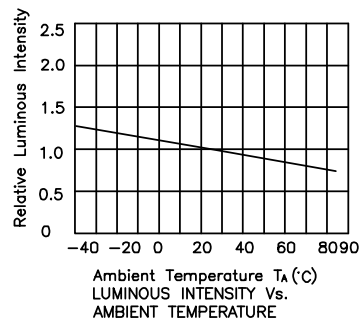
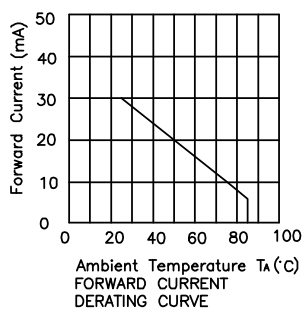
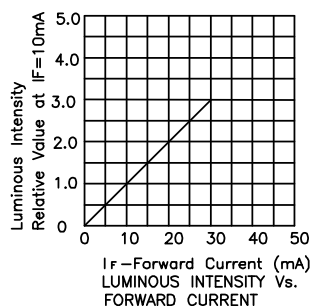
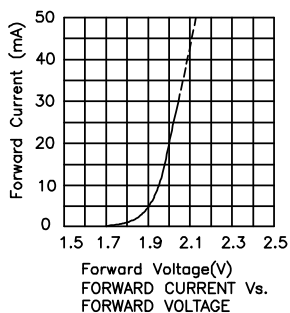
Notes:

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



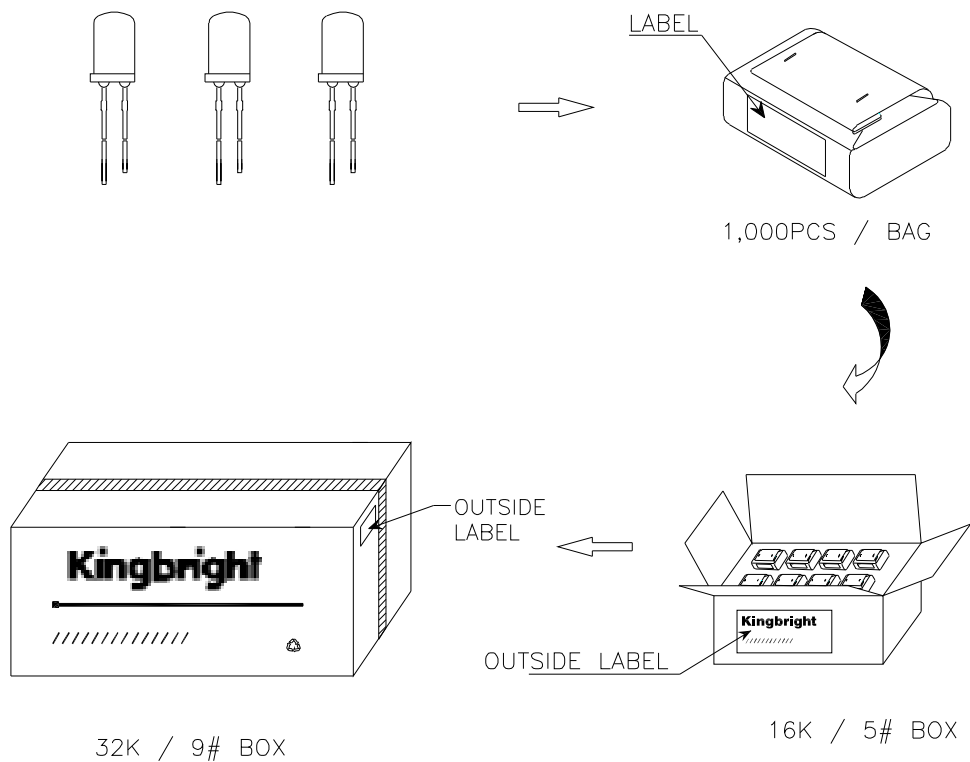
High Efficiency Red

WP7083ID



PACKING & LABEL SPECIFICATIONS

WP7083ID



Kingbright	
Q.C.	
TYPE NO :	WP7083xxx
QUANTITY :	1,000 pcs
S/N :	xxx
CODE:	xx
LOT NO :	 xxxxxxxxxx
RoHS Compliant	