



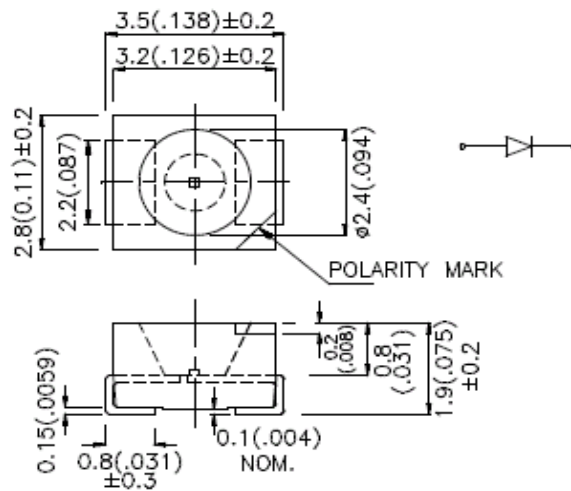
Features

- z SINGLE COLOR.
- z SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- z AVAILABLE ON TAPE AND REEL.
- z IDEAL FOR BACKLIGHTING.
- z PACKAGE : 2000PCS / REEL.
- z RoHS COMPLIANT.

Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate 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) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
RY-3528-RC	HYPER RED (InGaAlP)	WATER CLEAR	300	350	120

Note:

1. θ 1/2 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	Red	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Red	635	640	nm	IF=20mA
λ _D	Dominant Wavelength	Red			nm	IF=20mA
LM	luminance	Red	300	350	MCD	IF=20mA
C	Capacitance	Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Red	2.0	2.2	V	IF=20mA
IR	Reverse Current	Red		5	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

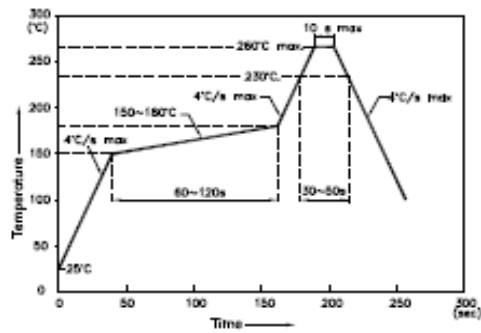
Parameter	Red	Units
Power dissipation	125	mW
DC Forward Current	50	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

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

RY-3528-RC

Reflow Soldering Profile For Lead-free SMT Process.

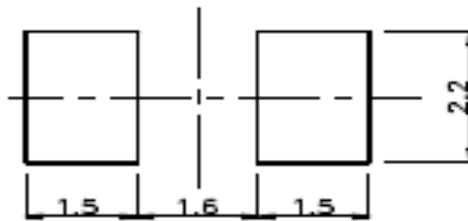


NOTES:

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.

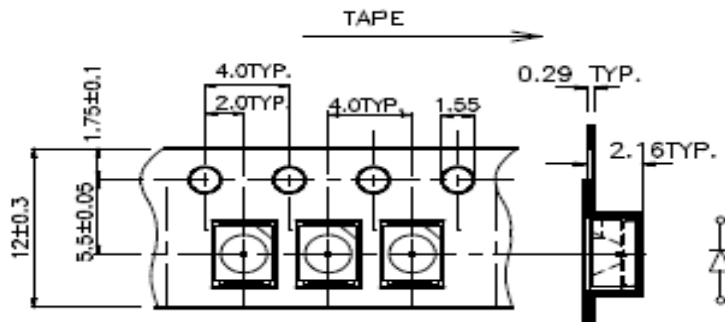
Recommended Soldering Pattern

(Units : mm)



Tape Specifications

(Units : mm)



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.