2.0x1.2mm SMD CHIP LED LAMP

APT2012QYW YELLOW

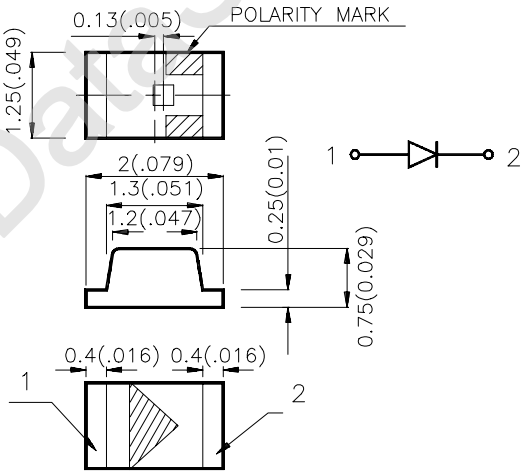
Features

- 2.0mmx1.2mm SMT LED,0.75mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- ACCORDING TO THE CLASSIFICATION OF LASER PRODUCTS OF IEC 60825-1, THE INDICATOR UNDER CONSIDERATION IS CLASSIFIED AS CLASS 1.
- PACKAGE : 2000PCS / REEL.

Description

The Yellow source color devices are made with Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.1(0.004") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
APT2012QYW	YELLOW (GaP)	WHITE DIFFUSED	3	12	120°

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

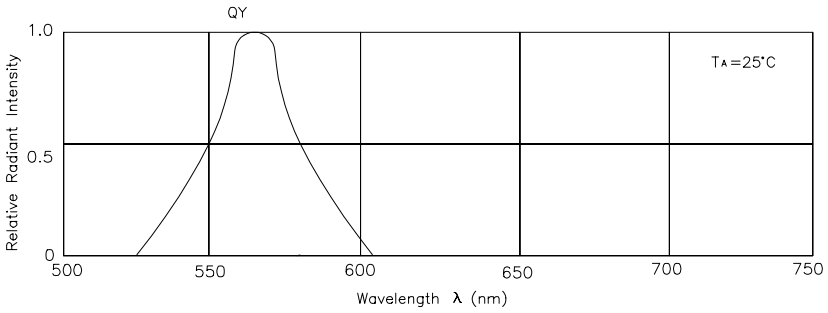
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	YELLOW	565		nm	IF=20mA
λ D	Dominate Wavelength	YELLOW	568		nm	IF=20mA
Δλ1/2	Spectral Line Halfwidth	YELLOW	30		nm	IF=20mA
C	Capacitance	YELLOW	15		pF	VF=0V;f=1MHz
V_F	Forward Voltage	YELLOW	2.2	2.5	V	IF=20mA
I_R	Reverse Current	YELLOW	10		uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

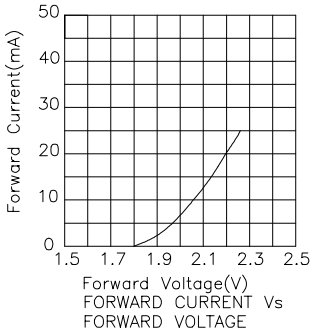
Parameter	YELLOW	Units
Power dissipation	105	mW
DC Forward Current	25	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

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

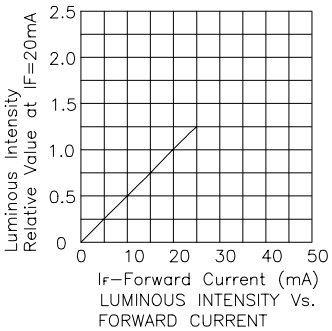


RELATIVE INTENSITY Vs. WAVELENGTH

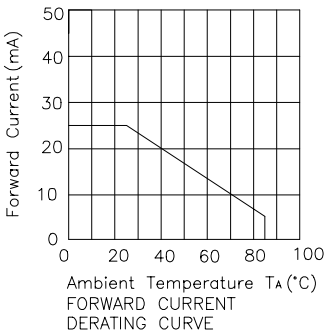
Yellow APT2012QYW



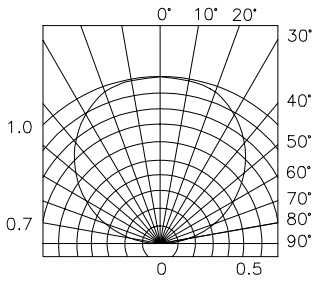
FORWARD CURRENT Vs
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



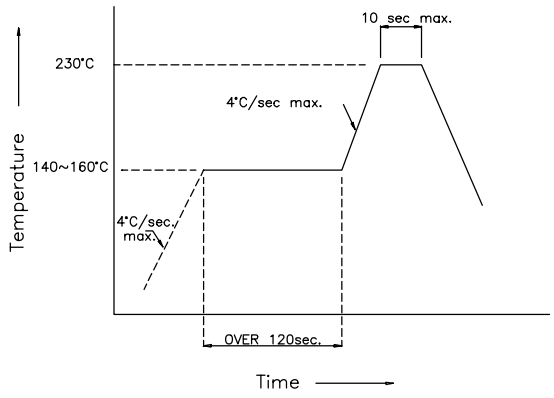
FORWARD CURRENT
DERATING CURVE



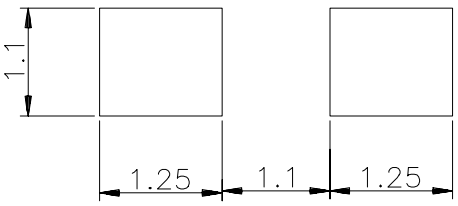
SPATIAL DISTRIBUTION

APT2012QYW
SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern
(Units : mm)



Tape Specifications
(Units : mm)