

PRELIMINARY SPEC

APBA3210SURKCGKC

HYPER RED
GREEN

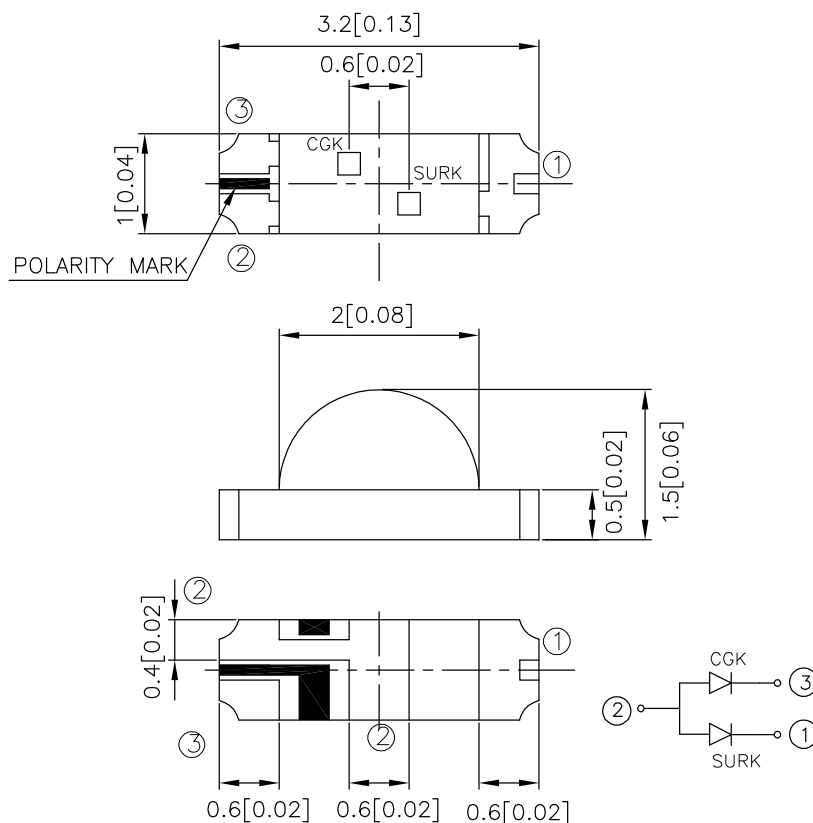
Features

- LOW POWER CONSUMPTION.
- 3.2mmX1.0mm RIGHT ANGLE SMT LED, 1.5mm THICKNESS.
- WIDE VIEWING ANGLE.
- PACKAGE : 2000PCS / REEL.

Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode. The Green source color devices are made with InGaAlP on GaAs substrate Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ 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
APBA3210SURKCGKC	HYPER RED (InGaAIP)	WATER CLEAR	110	200	120°
	GREEN (InGaAIP)		18	50	

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 TA=25°C

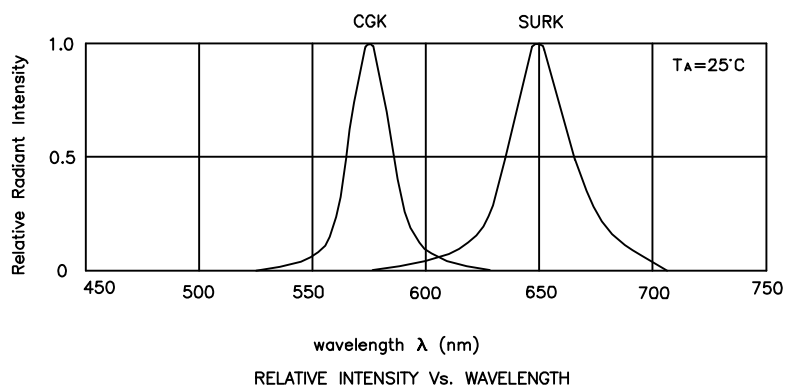
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Hyper Red Green	650 574		nm	IF=20mA
λ_D	Dominant Wavelength	Hyper Red Green	635 570		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Red Green	28 20		nm	IF=20mA
C	Capacitance	Hyper Red Green	35 15		pF	VF=0V;f=1MHz
VF	Forward Voltage	Hyper Red Green	1.95 2.1	2.5 2.5	V	IF=20mA
IR	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

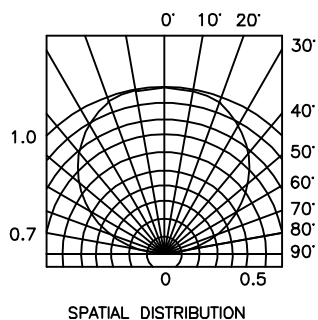
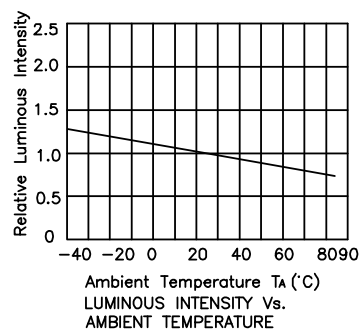
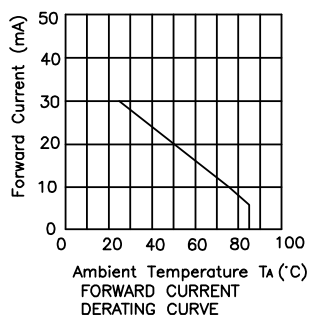
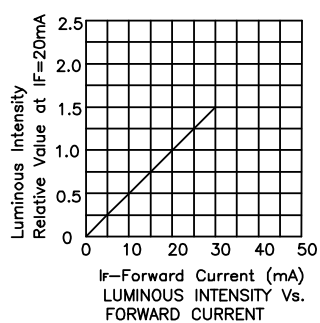
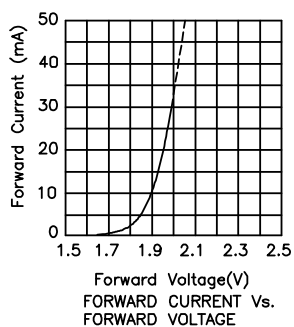
Parameter	Hyper Red	Green	Units
Power dissipation	170	105	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	185	150	mA
Reverse Voltage	5	5	V
Operating/storage Temperature	-40°C To +85°C		

Note:

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

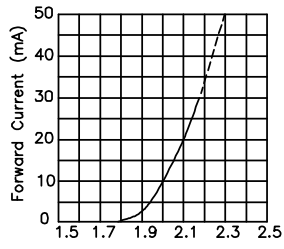


APBA3210SURKCGKC Hyper Red

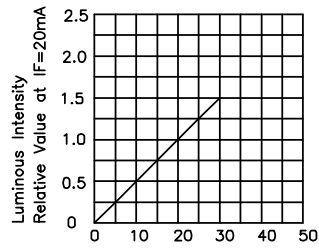


Kingbright

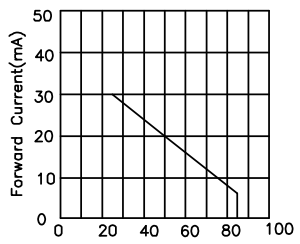
Green



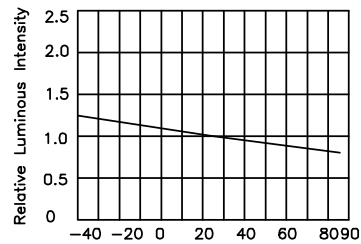
Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE



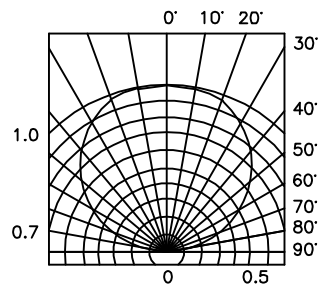
IF-Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



Ambient Temperature TA (°C)
FORWARD CURRENT
DERATING CURVE



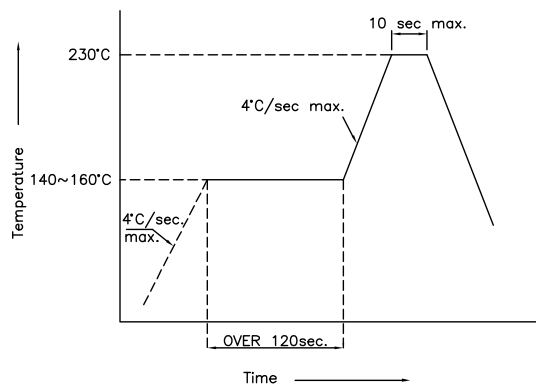
Ambient Temperature TA (°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



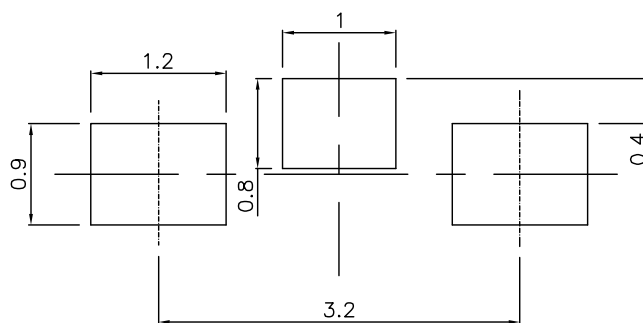
SPATIAL DISTRIBUTION

APBA3210SURKCGKC SMT Reflow Soldering Instructions

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



Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)

