# **1W HIGH POWER RGB LED**



ATTENTION: LED IS AN ELECTROSTATIC SENSITIVE DEVICE. HANDLE WITH PRECAUTION.

### FEATURES

- Guaranteed minimum flux up to 20 for Blue, 60 for Green, 30 for Red at 350mA
- Maximum drive current up to 400mA.
- Max junction temperature :120 °C
- No UV light
- Fast lit up response (less than 100nS)
- Patented thermal management process, industries' lowest thermal resistance from Chip base to STAR heat sink.
- Electrically neutral thermal path
- Long lifetime of 50,000 hours.
- RoHS-compliant
- Compatible with most commonly available collimators in the market.



#### TYPICAL APPLICATIONS

- Stage lighting
- Exterior and interior decorative lightings for shops, restaurants, hotels, discos, pubs, etc
- Signage lighting.
- Landscape lightings like parks, bridges, buildings.
- Edge-lit signs.

Flux Characteristics ( $T_i = 25^{\circ}C$ ;  $I_F = 350mA$ )

Color	Wave Length (nm)	Luminous Flux(lm)	Ordering Code	
Red	620~630	30~40	NPT1RGB306020E	
Green	520~530	60~70		
Blue	460~470	20~25		

Note: NPT maintains a tolerance of +/- 4% on flux measurements.

#### **Characteristics**

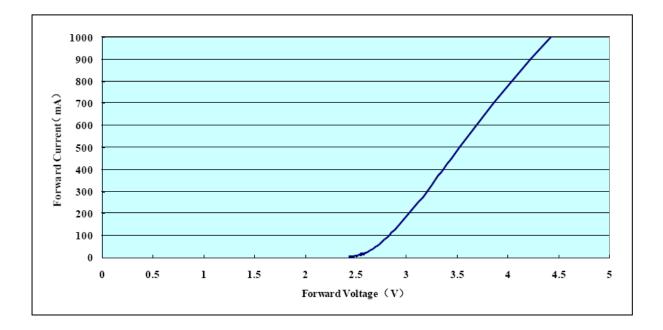
Characteristics	Unit	Minimum	Typical	Maximum
Viewing Angle	degrees	145	150	155
DC forward current	mA			370
DC pulse current (@ 1kHz, 10% duty cycle)	mA			400
Reverse voltage	v			5
Reverse Leakage current @5V	uA			10
Forward Voltage @350mA – Green, Blue	V	3.0	3.4	3.6
Forward Voltage @350mA – Red	v	2.0	2.4	2.6
LED Junction Temperature	°C			120
Suggested operating case temperature	°C			80
Storage temperature	°C	-40		100
Electrostatic Discharge Threshold (HBM)	V			2000

Note: NPT maintains a tolerance of +/- 0.1V on Forward Voltage measurements.

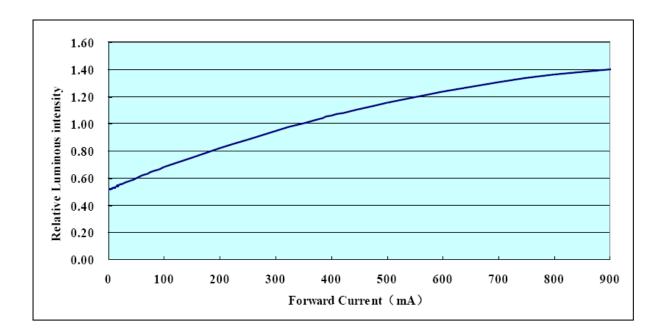
#### NPT LED

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#### **Electrical Characteristics** ( $T_i = 25 \ ^\circ C$ )

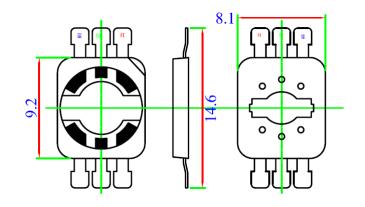


#### **Relative Flux vs Current** ( $T_i = 25 \ ^\circ C$ )



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## **Outline dimensions**



Note:

- 1. All units in mm
- 2. Tolerance +/- 0.2mm