### **5W HIGH POWER STAR LED**



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



#### FEATURES

- Guaranteed minimum flux up to 280lm for White and 110lm for Blue at 1400mA
- Available in White (2,500K to 10,000K CCT) and Blue (460~470nm)
- Maximum drive current up to 2000mA.
- Max junction temperature :150 °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

- Street Lamp to replace HPS and LPS lamps.
- Commercial lightings to replace Halogen and fluorescent lamps.
- Reading lights in Car, Bus, Aircraft and Trains.
- Portable lights such as camping light, flashlight, bicycle headlamp, mining headlamp.
- Exterior and interior decorative lightings for shops, restaurants, hotels, discos, pubs, etc
- Signage lighting.
- Landscape lightings like parks, bridges, buildings.
- Automotive headlamp, tail lights and direction lights.
- Edge-lit signs.

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# Flux Characteristics ( $T_i = 25^{\circ}C$ ; $I_F = 1400mA$ )

Color	CCT Range (K)	Luminous Flux(lm)	Ordering Code	
White	5500~6500	280~320	NPT5W2805565S	
Warm White	2700~3300	260~300	NPT5W2602733S	

Color	Wave Length (nm)	Luminous Flux(lm)	Ordering Code	
Blue	460~470	110~130	NPT5B1104647S	

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

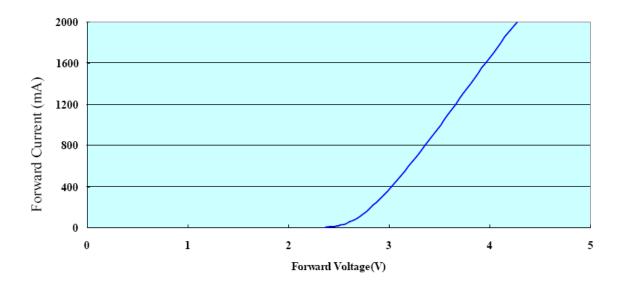
### **Characteristics**

Characteristics	Unit	Minimum	Typical	Maximum
Viewing Angle	degrees	115	120	125
DC forward current	mA			1600
DC pulse current (@ 1kHz, 10% duty cycle)	mA			2000
Reverse voltage	V			5
Reverse Leakage current @5V	uA			10
Forward Voltage @1400mA	V		3.6	3.8
LED Junction Temperature	°C			150
Suggested operating heat sink temperature	°C			85
Storage temperature	°C	-40		100
Electrostatic Discharge Threshold (HBM)	V			2000

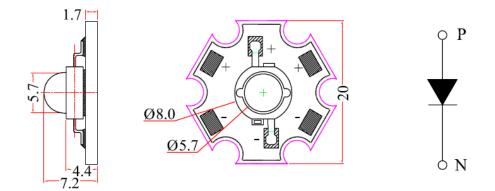
Note: NPT maintains a tolerance of +/- 0.1V on Forward Voltage measurements.

# **5W HIGH POWER STAR LED**

### **Electrical Characteristics** ( $T_i = 25$ °C)



# **Outline dimensions**



### Note:

- 1. All units in mm
- 2. Tolerance +/- 0.25mm