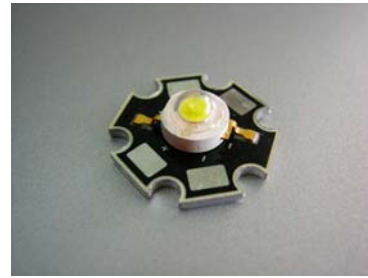


3W HIGH POWER STAR LED



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



■ FEATURES

- Guaranteed minimum flux up to 160 for white, 40 for Blue, 100 for Green, 60 for Red and Yellow at 680mA
- Available in White (2,500K to 10,000K CCT), Blue, Green, Red and Yellow.
- Maximum drive current up to 1000mA.
- 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.

3W HIGH POWER STAR LED**Flux Characteristics ($T_j = 25^\circ\text{C}$; $I_F = 680\text{mA}$)**

Color	CCT Range (K)	Luminous Flux(lm)	Ordering Code
White	5000~6500	130~160	NPT3W1305065S
White	5000~6500	160~180	NPT3W1605065S
Warm White	2700~3300	120~150	NPT3W1202733S
Warm White	2700~3300	150~170	NPT3W1502733S

Color	Wave Length (nm)	Luminous Flux(lm)	Ordering Code
Red	620~630	60~80	NPT3R0606263S
Yellow	585~595	60~80	NPT3Y0605859S
Blue	460~470	40~50	NPT3B0404647S
Green	520~530	100~120	NPT3G1205253S

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

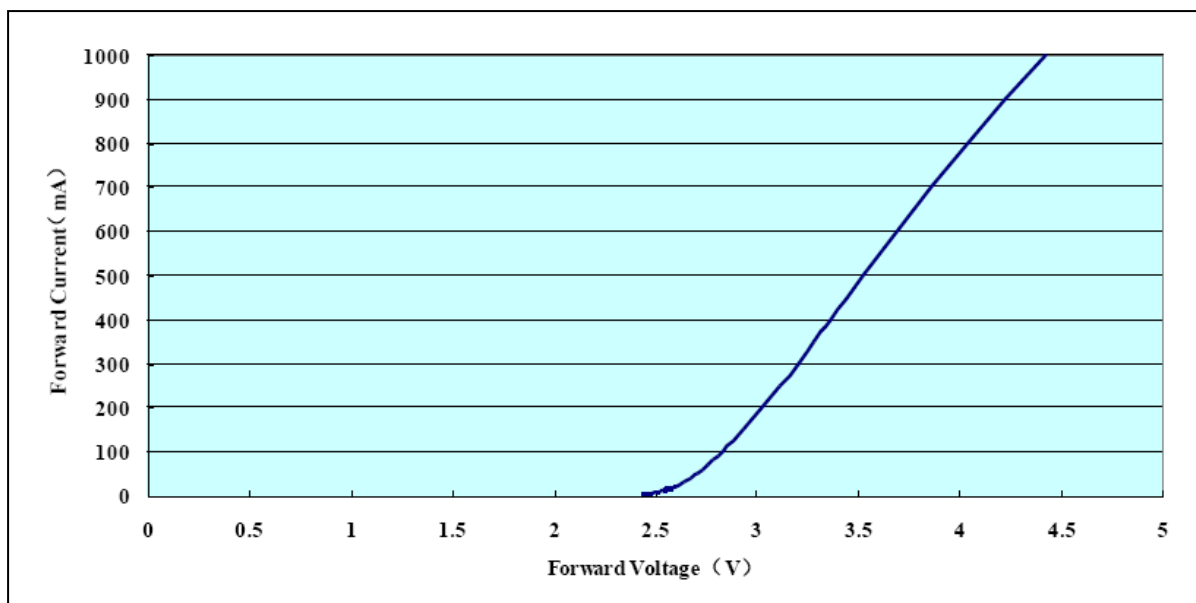
3W HIGH POWER STAR LED

Characteristics

Characteristics	Unit	Minimum	Typical	Maximum
Viewing Angle	degrees	115	120	125
DC forward current – White >160lm	mA			1000
DC forward current – White <160lm and colors	mA			800
DC pulse current (@ 1kHz, 10% duty cycle)	mA			1000
Reverse voltage	V			5
Reverse Leakage current @5V	uA			10
Forward Voltage @350mA – White, Green, Blue	V	3.2	3.4	3.8
Forward Voltage @350mA – Red, Yellow	V	2.0	2.4	2.8
LED Junction Temperature – White >160lm	°C			150
LED Junction Temperature – others	°C			120
Suggested operating heat sink temperature	°C			75
Storage temperature	°C	-40		100
Electrostatic Discharge Threshold (HBM)	V			2000

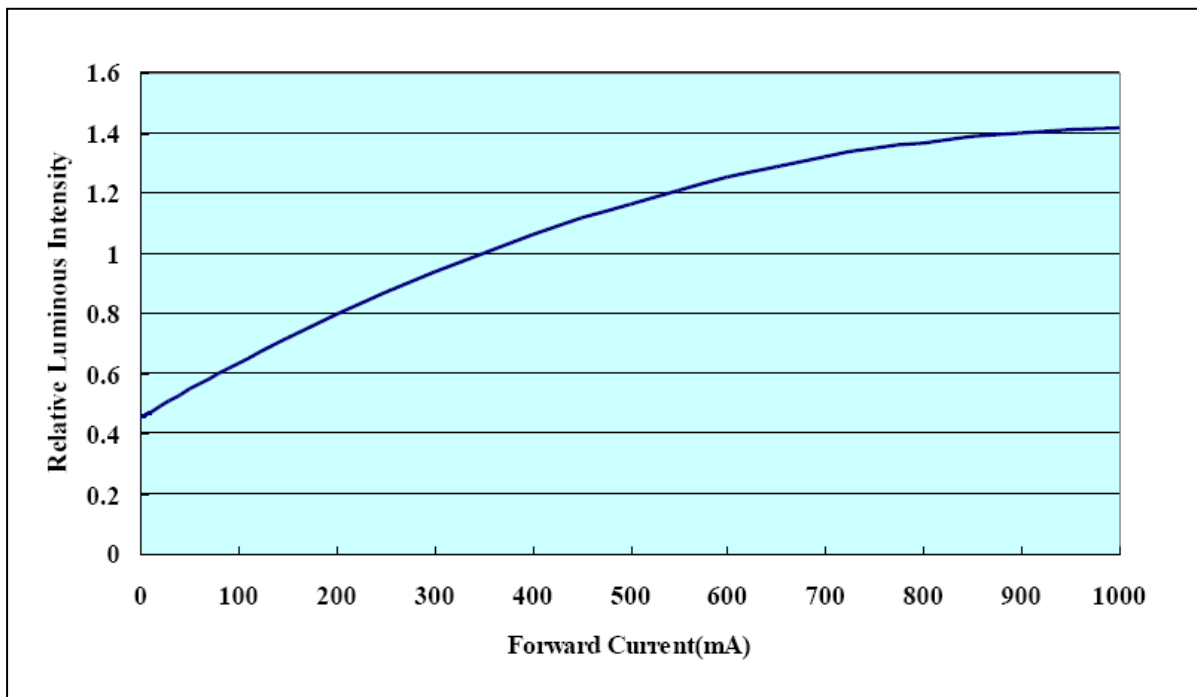
Note: NPT maintains a tolerance of +/- 0.1V on Forward Voltage measurements.

Electrical Characteristics (T_i = 25 °C)

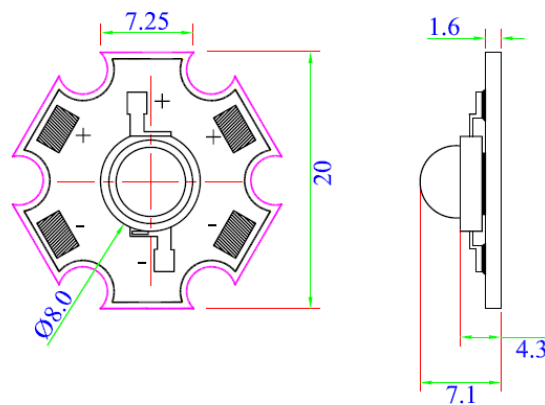


3W HIGH POWER STAR LED

Relative Flux vs Current ($T_i = 25\text{ }^\circ\text{C}$)



Outline dimensions



Note:

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