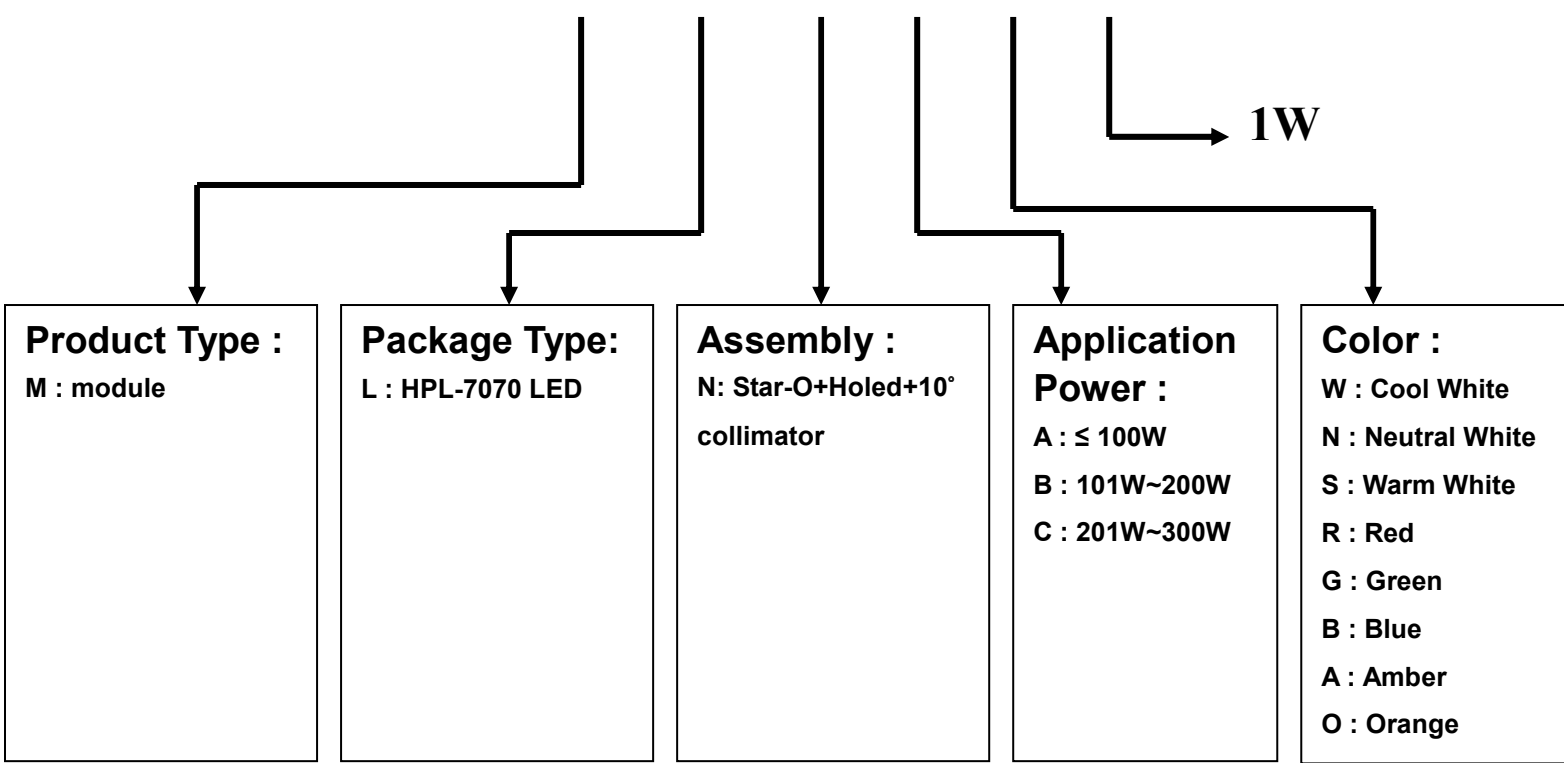


SPECIFICATION



HPL- M L - N A X 01



1. Features

- Lambertian or Collimated Radiation Pattern
- Low voltage DC operated
- 1W High Flux type
- All Metal Design Cu PCB/Al reflector
- Low thermal resistance
- The InGaN or AlInGaP Chip inside
- Superior ESD protect

2. Application

- Traffic signaling
- Backlighting
- Interior & exterior automotive lighting
- Decorative and landscape lighting
- Portable light source
- Decorating and entertainment lighting
- Architectural lighting
- Street lighting

3. Absolute Maximum Ratings

(T_j=25°C)

Parameter		Symbol	Rating	Unit
Power Dissipation	Cool White	P	1.5	W
	Neutral White		1.5	
	Warm White		1.5	
	Red		1.05	
	Green		1.5	
	Blue		1.5	
	Amber		1.05	
	Orange		1.05	
Forward Current		IF	350	mA
Forward Pulse Current (1/10 Duty Cycle, 400msec Pulse Width)		IFP	500	mA
Thermal Resistance, Junction-Case		R _{th} , J-C1	10	°C/W
Reverse Voltage		VR	5	V
LED Junction Temperature		T _j	125	°C

Note: 1. The thermal resistance value is measured with MCPCB (Star).

4. Initial Electrical/Optical Characteristics

• Forward Voltage

(T_j=25°C)

Color	Forward Voltage					
	Symbol	MIN.	TYP.	MAX.	Test Condition	Unit
Cool White	V _F	3.03	3.80	4.23	I _F = 350mA	V
Neutral White	V _F	3.03	3.80	4.23	I _F = 350mA	V
Warm White	V _F	3.03	3.80	4.23	I _F = 350mA	V
Red	V _F	1.83	2.50	3.03	I _F = 350mA	V
Green	V _F	3.03	3.80	4.23	I _F = 350mA	V
Blue	V _F	3.03	3.80	4.23	I _F = 350mA	V
Amber	V _F	1.83	2.50	3.03	I _F = 350mA	V
Orange	V _F	1.83	2.50	3.03	I _F = 350mA	V

• Luminous Flux

(T_j=25°C)

Color	Luminous Flux					
	Symbol	MIN.	TYP.	MAX.	Test Condition	Unit
Cool White	Φ _V	-	70	-	I _F = 350mA	lm
Neutral White	Φ _V	-	50	-	I _F = 350mA	lm
Warm White	Φ _V	-	34	-	I _F = 350mA	lm
Red	Φ _V	-	40	-	I _F = 350mA	lm
Green	Φ _V	-	60	-	I _F = 350mA	lm
Blue	Φ _V	-	12	-	I _F = 350mA	lm
Amber	Φ _V	-	37	-	I _F = 350mA	lm
Orange	Φ _V	-	42	-	I _F = 350mA	lm

- Radiometric Power**

(T_j=25°C)

Color	Luminous Flux					
	Symbol	MIN.	TYP.	MAX.	Test Condition	Unit
Blue ¹	Φ_V	-	200	-	I _F = 350mA	mW

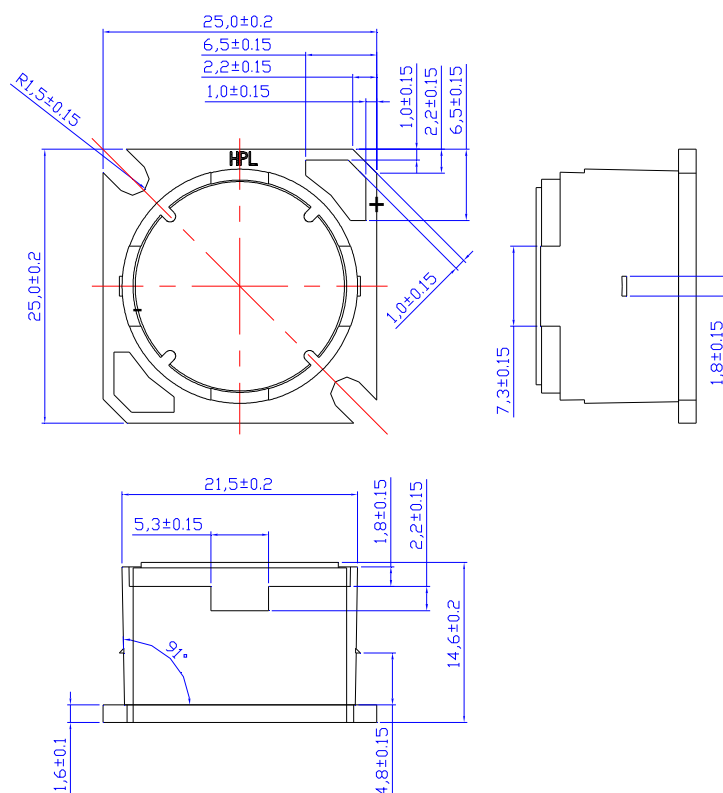
- Color Temperature or Dominate wavelength**

(T_j=25°C)

Color	Color Temperature or Dominate Wavelength					
	Symbol	MIN.	TYP.	MAX.	Test Condition	Unit
Cool White	CCT	4100	5600	10000	IF = 350mA	°K
Neutral White	CCT	3250	3800	5650	IF = 350mA	°K
Warm White	CCT	2760	3250	4100	IF = 350mA	°K
Red	λ_d	620	-	630	IF = 350mA	nm
Green	λ_d	520	-	540	IF = 350mA	nm
Blue ¹	λ_d	450	-	470	IF = 350mA	nm
Amber	λ_d	585	-	595	IF = 350mA	nm
Orange	λ_d	610	-	620	IF = 350mA	nm

Note: 1. Royal Blue Products: Wavelength defined is Peak Wavelength ($\lambda_p = 450 \sim 460\text{nm}$).

5. Outline Dimension



6. Typical Radiation Pattern

