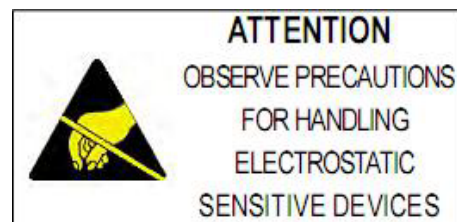


## Мощный светодиод **ARPL-1W-EPL35 Blue**

### Features:

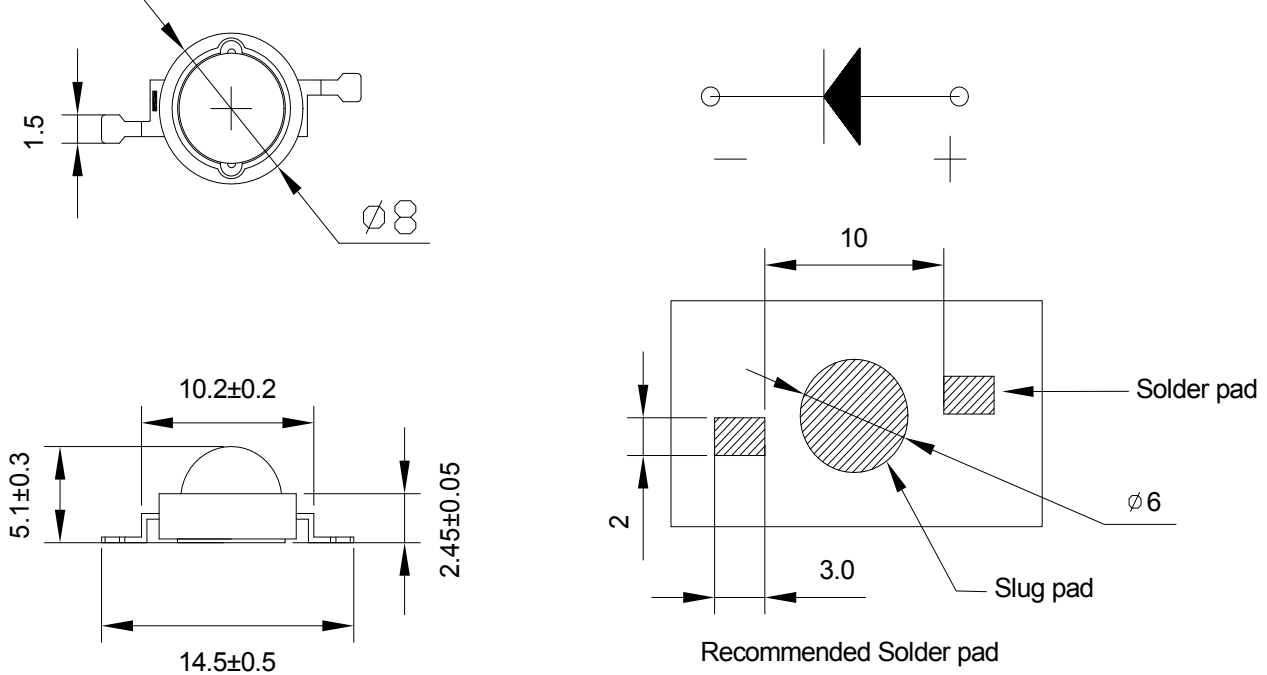
- More energy efficient than incandescent and most halogen lamps
- low voltage operation
- Instant light
- Long operating life
- Anti UV



### Applications:

- Indoor lighting:  
spot light, ceiling light, bulb.....
- Architectural and landscape lighting:  
down light, wall lamp, garden light
- Roadway lighting:  
Street light, garden light, tunnel light
- Display lighting:

## ■ Package Dimensions



Notes: All dimensions in mm tolerance is  $\pm 0.1\text{mm}$  unless otherwise noted

## ■ Absolute Maximum Ratings (Ta=25°C)

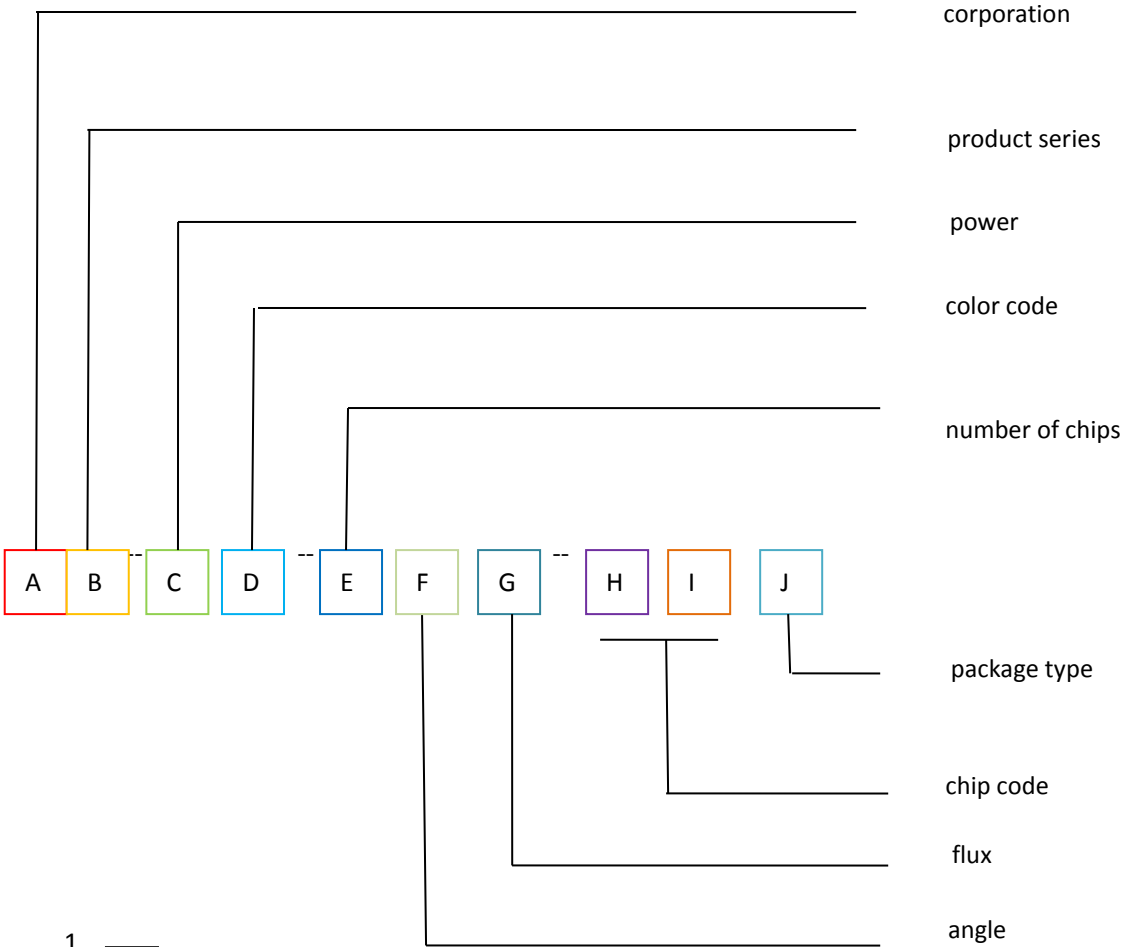
Parameter	Symbol	Rating	Unit
DC Forward Current	$I_F$	350	mA
Peak pulse Current*	$I_{FP}$	1000	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	1	W
Operating Temperature Range	$T_{OPR}$	-30 ~ +75	°C
Storage Temperature Range	$T_{STG}$	-40 ~ +85	°C
LED Junction Temperature	$T_J$	125	°C

Notes: 1. 1/10 Duty Cycle 0.1ms Pulse Width.

■ Electrical/Optical Characteristics--White (At TA=25°C)

Parameter	Symbol	Conditions	Min	Avg.	Max	Units
Forward Voltage	$V_F$	$I_F=350mA$	3.00	--	3.40	V
Thermal Resistance Junction To Board	$R\theta_{J-B}$	$I_F=350mA$	--	10	--	°C/W
Luminous Flux	$\Phi_v$	$I_F=350mA$	20		30	lm
Dominant wavelength	$\lambda_d$	$I_F=350mA$	460		470	nm
Temperature Coefficient of Forward Voltage	$\Delta V_F/\Delta T$	$I_F=350mA$	--	-2	--	mV/°C
Reverse Current	$I_R$	$V_R=5V$	--	--	10	$\mu A$
Viewing Angle	$2\theta_{1/2}$	$I_F=350mA$	--	140	--	Deg

■ part No. Description



1. A : GM
2. B : high power
3. C : power code

code	power
0	0.5w
1	1w
3	3w
5	5w

4. D color code

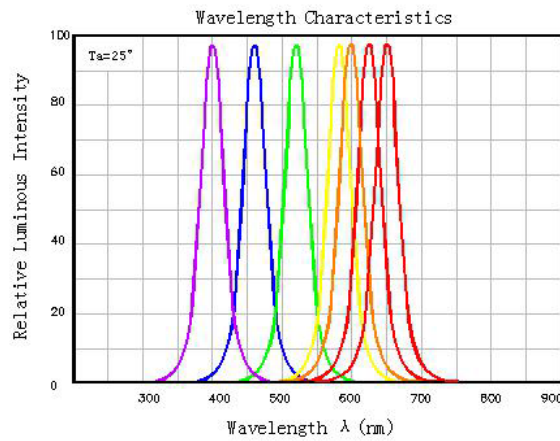
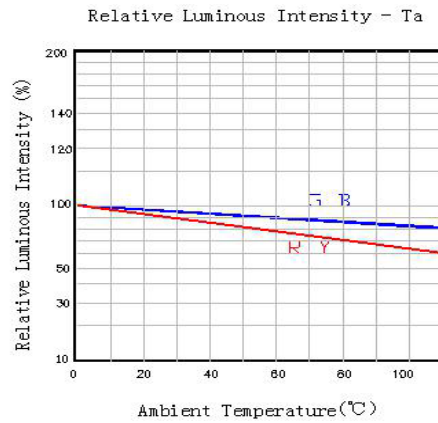
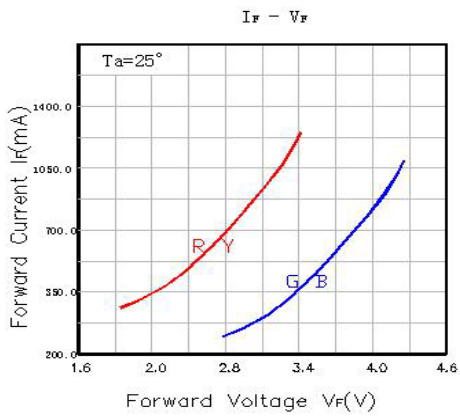
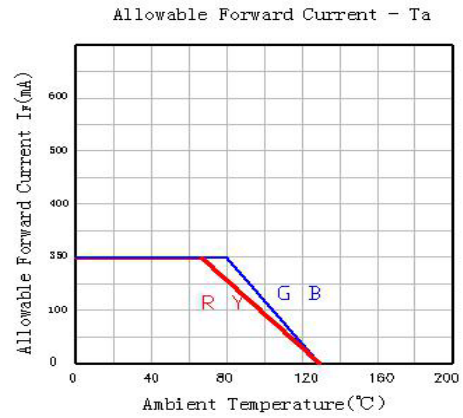
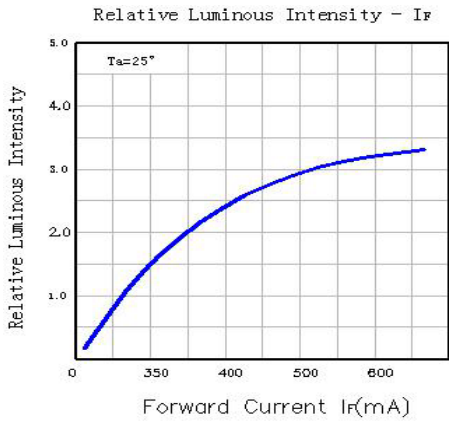
purple		blue		green		yellow green	
P1	365-370	B1	450-455	G1	510-512.5	E1	546-550
P2	370-375	B2	455-460	G2	512.5-515	E2	550-555
P3	375-380	B3	460-462.5	G3	515-517.5	E3	555-558
P4	380-385	B4	462.5-465	G4	517.5-520	E4	558-561
P5	385-390	B5	465-467.5	G5	520-522.5	E5	561-564
P6	390-400	B6	467.5-470	G6	522.5-525	E6	564-567
P7	400-405	B7	470-472.5	G7	525-527.5	E7	
P8	405-410	B8	472.5-475	G8	527.5-530	E8	

yellow		orange		red	
Y1	582.5-585	C1	600-605	R1	615-620
Y2	585-587.5	C2	605-610	R2	620-625
Y3	587.5-590	C3	610-615	R3	625-630
Y4	590-592.5	C4		R4	630-635
Y5	592.5-595			R5	635-640
Y6	595-597.5			R6	640-650
Y7	597.5-600				
Y8					

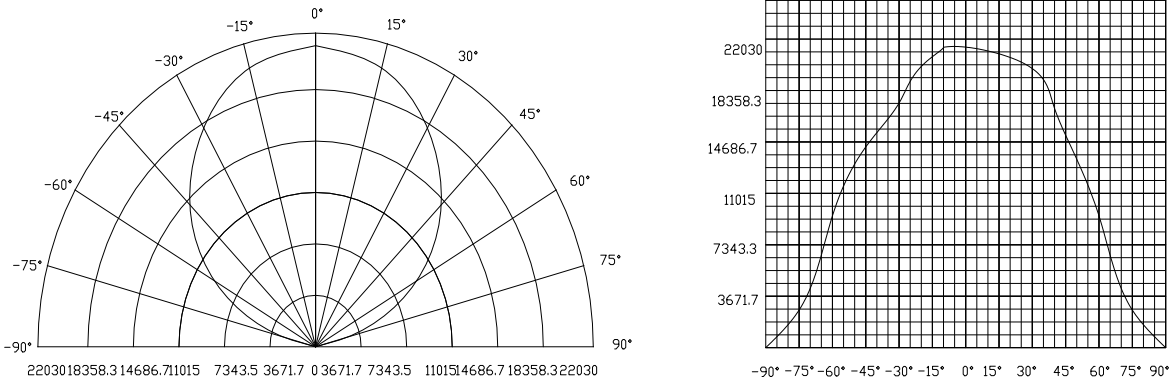
white		
W3	5000k	CCT<5000K
W6	5000k	CCT>5000k

## ■ Typical Optical/Electrical Characteristics Curves

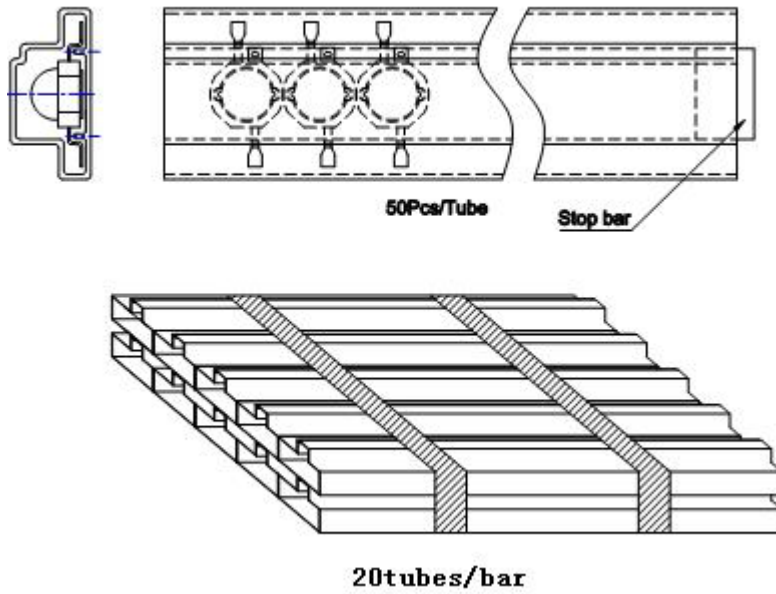
( $T_a=25^\circ\text{C}$  Unless Otherwise Noted)



■ Radiation Diagram



■ Packing Standard



## Reliability test standards

Test Item	REF. Standard	Test condition	Duration	Sample count	Accept
Temperature Cycle	JESD22-A104-A	-40°C~25°C~100°C~25°C 30min,5min,30min,5min	100 cycles	22	0/22
Thermal shock	JESD22-A106	-40°C~100°C 30min, 30min	100 cycles	22	0/22
High Temperature Storage	JEITA ED-4701 200 201	TA=100°C ± 5°C	1000 Hrs	22	0/22
Low Temperature Storage	JEITA ED-4701 200 202	TA=-40°C ± 5°C	1000 Hrs	22	0/22
Humidity Heat Storage	JIS C 7021 (1977)B-11	Ta=60°C RH=85%	1000Hrs	22	0/22
Life test	JESD22-A108-A	Ta=25°C If=20mA	1000Hrs	22	0/22
High humidity Heat life test	JESD22-A101	Ta=60°C RH=85% IF=15mA	1000Hrs	22	0/22
Resistance to soldering Heat	JESD22-A113	IR soldering 245°C/10sec	1 time	20	0/22

## Precautions for use

### 1. Storage

- (1) The best Storage environment: temperature :5°C~30°C , Humidity:40% -80%HR
- (2) LED store after six months to be re-spectral color separation, to prevent the LED optical properties change

### 2. Production and application

- (1) need wear gloves when contact with led to prevent oxidation
- (2) ESD protection to be good
- (3) soldering: the pc type can use soldering iron, (the best temperature is 300°C/3sec) also can use Temperature Platform (150°C/30sec,max) the silicone type can use reflow soldering in addition to soldering iron and Temperature Platform
- (4) about Package-type silicone , It is recommended to bake before soldering when the pack is unsealed after 24h。 The conditions are as following: 80°C 4-6h。
- (5) must have a good heat sinking, the temperature of the heat sink must be below 65 degree

### 3.Reflow temp/time

