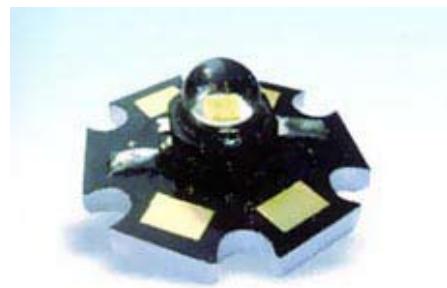


## **ARPL-Star-5W WHITE (140°, EWJ85E)**



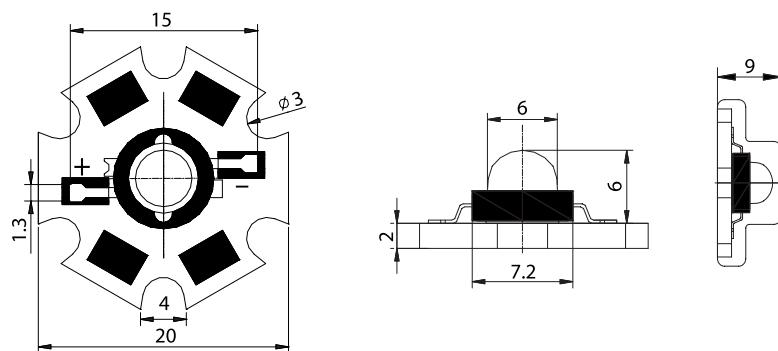
### **Features**

- Highest flux per LED family in the world
- Very long operating life (up to 100k hours)
- Available in White:2500K-25000K
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam, safe to the touch
- Fully dimmable
- No UV
- Superior ESD protection lower Rth
- RoHS compliant—lead-free
- Instant light (less than 100ns )

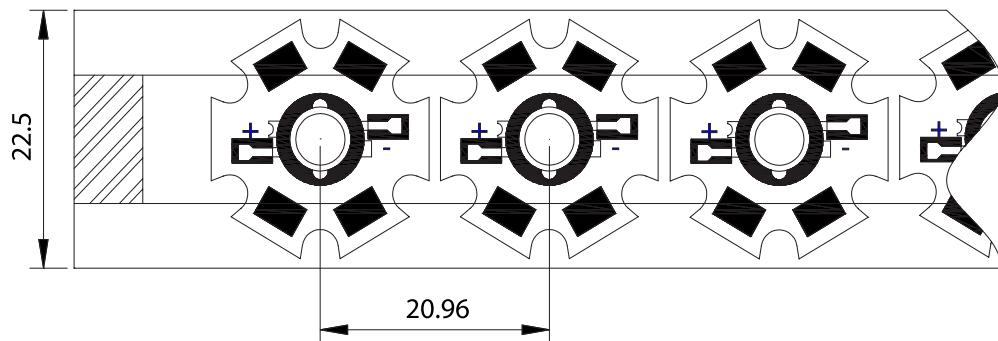
### **Applications**

- Portable (flashlight, bicycle)
- Reading lights(car, bus, aircraft)
- Orientation
- Mini-accent
- Decorative
- Fiber optic alternative
- Appliance
- Sign and channel letter
- Architectural detail
- Cove lighting
- Automotive exterior (Stop-Tail-turn, CHMSL, Mirror side repeat)
- Edge-lit signs(Exit, point of sale)

### **Package Dimensions**



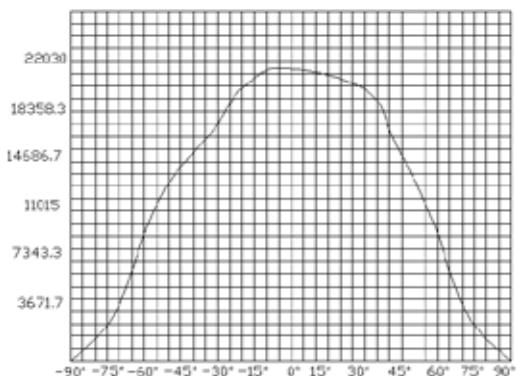
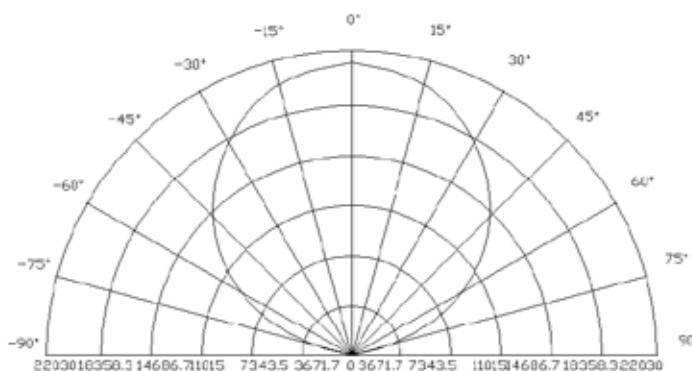
### **Tape Specifications (Units:mm)**



#### **Notes:**

1. All dimension units are millimeters.
2. All dimension tolerance is  $\pm 0.2\text{mm}$  unless otherwise noted.

## Radiation Pattern



## Typical Electrical / Optical Characteristics at TA=25°C

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	VF	IF=1.2A	3.2	--	4.2	V
Reverse Current	IR	VR=5v	--	--	50	uA
50% Power Angle	2θ1/2	IF=1.2A	110	--	140	deg
Luminous Intensity	φV	IF=1.2A	147.7	169.9	--	lm
Recommend Forward Current	IF	--	--	1.2	--	A
Chromaticity	Tc	IF=1.2A	5000	--	10000	k
Thermal Resistance,Junction to Case	RJP	IF=1.2A	--	10	--	°C/W

The sample delivers goods data

Item	Symbol	Condition	Min.	Avg.	Max.	Unit
Luminous Intensity	φV	IF=1.2A	216	--	222	lm
50% Power Angle	2θ1/2		--	--	--	deg
Forward Voltage	VF		3.6	3.8	4.0	V
Chromaticity	Tc		6600	6700	6850	k
White Color Region			--			
ChromaticityCoordinates		X=--			Y=--	

### Notes:

- 1.Tolerance of measurement of forward voltage±0.1V.
- 2.Tolerance of measurement of peak Wavelength±2.0nm.
- 3.Tolerance of measurement of luminous intensity±15%.

## Absolute Maximum Rating

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	IF	1.2	A
Peak Forward Current*	IPF	1.3	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	5	W
Electrostatic discharge	ESD	±2000	V
Operation Temperature	TOPR	-40~+80	°C
Storage Temperature	TSTG	-40~+100	°C
Lead Soldering Temperature*	TSOL	Max. 260°C for 3sec Max.	

\*IPF Conditions Pulse Width≤10msec duty≤1/10

\* All high power emitter LED products mounted on aluminum metal-core printed circuit board, can be lighted directly, but we do not recommend lighting the high power products for more than 5 seconds without a appropriate heat dissipation equipment. \* Re-flow,wave peak and soak-stannum soldering etc.is not suitable for this products. \* Suggest to solder it by professional high power LED soldering machine. \* Can use invariable-temperature searing-iron with soldering condition:≤260 degree less than 3 seconds.