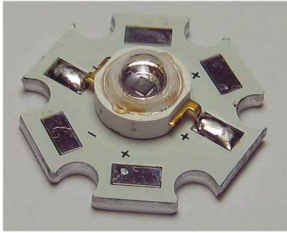


### High-Power 850nm Infrared LEDs



Onstate high-power infrared LEDs are designed specifically for CCTV applications with CCD/CMOS camera systems. The use of large, high-efficiency AlGaAs chips provides greater power allowing for a smaller illuminator size with less LEDs used. It is suitable for machine vision, security or data for intermittent or continuous, long-life, demanding applications. The LEDs are available in standard thru-hole or on metal PCBs to suit various applications.


**Applications:**

- Machine vision
- CCTV camera systems
- Data transmission

**Features:**

- Large AlGaAs chip
- High output power
- Long life, low degradation

**Product specifications:**

Part Number	Package Type	Wavelength (nm)	Max. Current (mA)	Beam Angle (deg)	Typ. Center Beam Intensity (mW/sr)
ELE-LED8520-1	5mm T1 3/4	850	150	20	300
ELE-LED8535-1	5mm T1 3/4	850	150	35	150
ELE-LED85W-1	Star PCB	850	1000	45	200
ELE-LED85F-1	Star PCB	850	1000	120	100

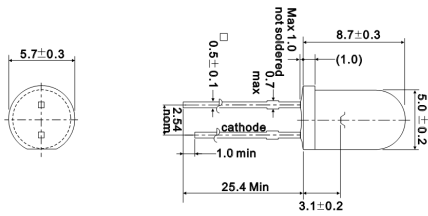
All 850nm LEDs are 1.6-1.7V typical forward voltage at rated current. Appropriate LED heatsinking is required for maximum performance and life span.


**LED CAUTIONS AND SAFETY:**

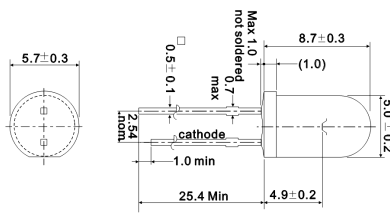
High intensity invisible infrared LED light source. DO NOT STARE DIRECTLY INTO LED.  
DO NOT EXCEED MAXIMUM LED CURRENT.

Proper ESD protection and handling required. Do not expose LEDs to greater than 85°C during normal operation.

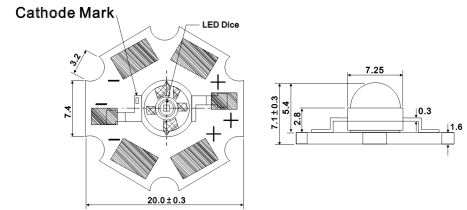
Dimensions:



5mm LED 20 degrees

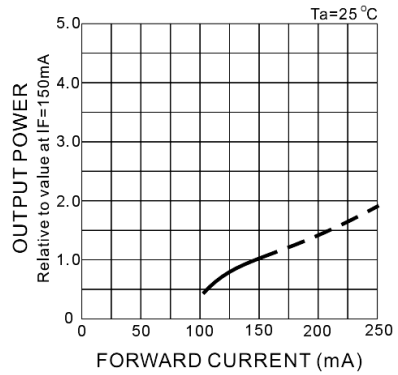
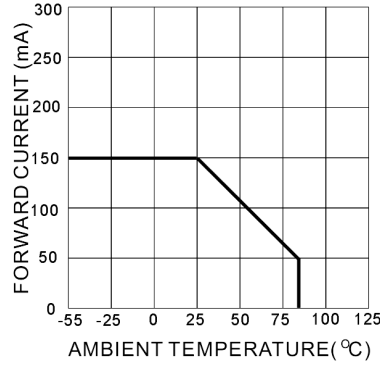
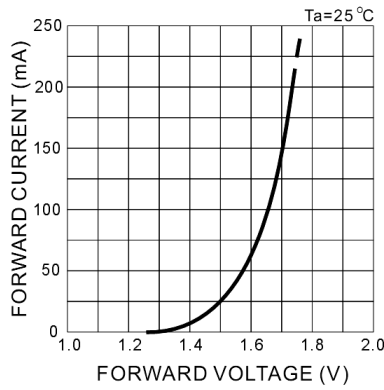


5mm LED 35 degrees

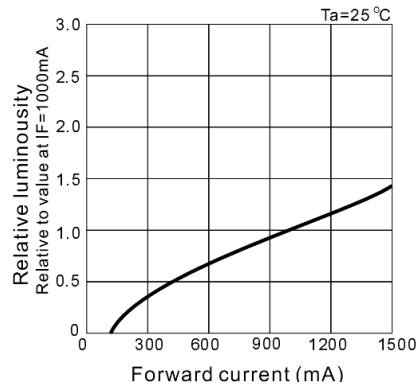
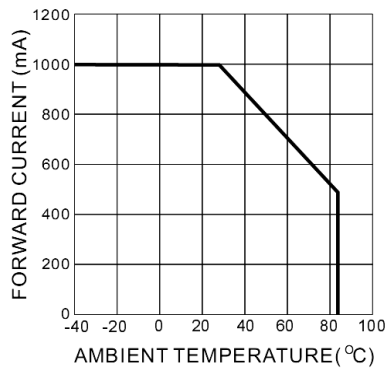
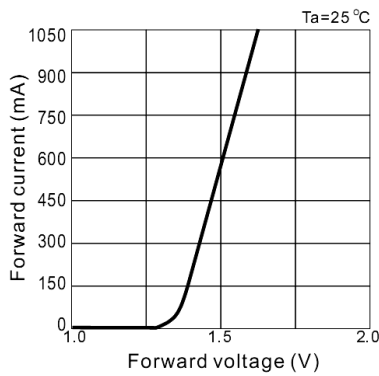


Star LED

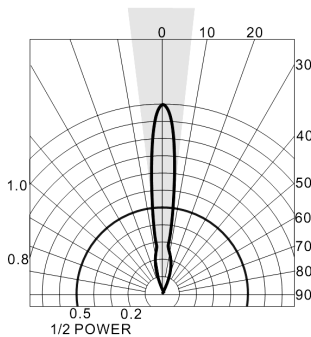
Performance Parameters:  
5mm T1 ¼ Infrared LED.



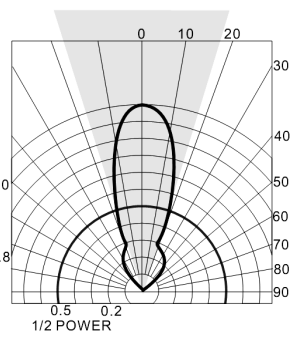
Star PCB infrared LED.



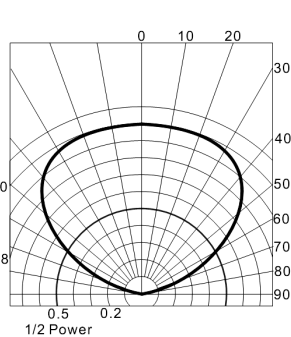
Beam Angles:



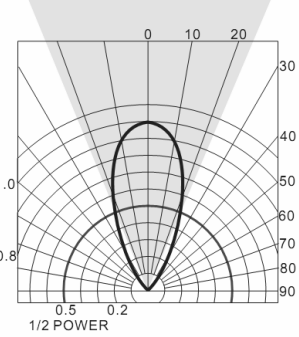
VIEW ANGLE Ta=25°C  
5mm LED 20°



VIEW ANGLE Ta=25°C  
5mm LED 35°



VIEW ANGLE Ta=25°C  
Star 120°



VIEW ANGLE Ta=25°C  
Star 45°