

# LEDs

Light Emitting Diodes - Solid State Lighting

Distributor



**amstechnologies**  
where technologies meet solutions

[info@amstechnologies.com](mailto:info@amstechnologies.com)  
[www.amstechnologies-webshop.com](http://www.amstechnologies-webshop.com)

**Contact us** 



# LED Product Map

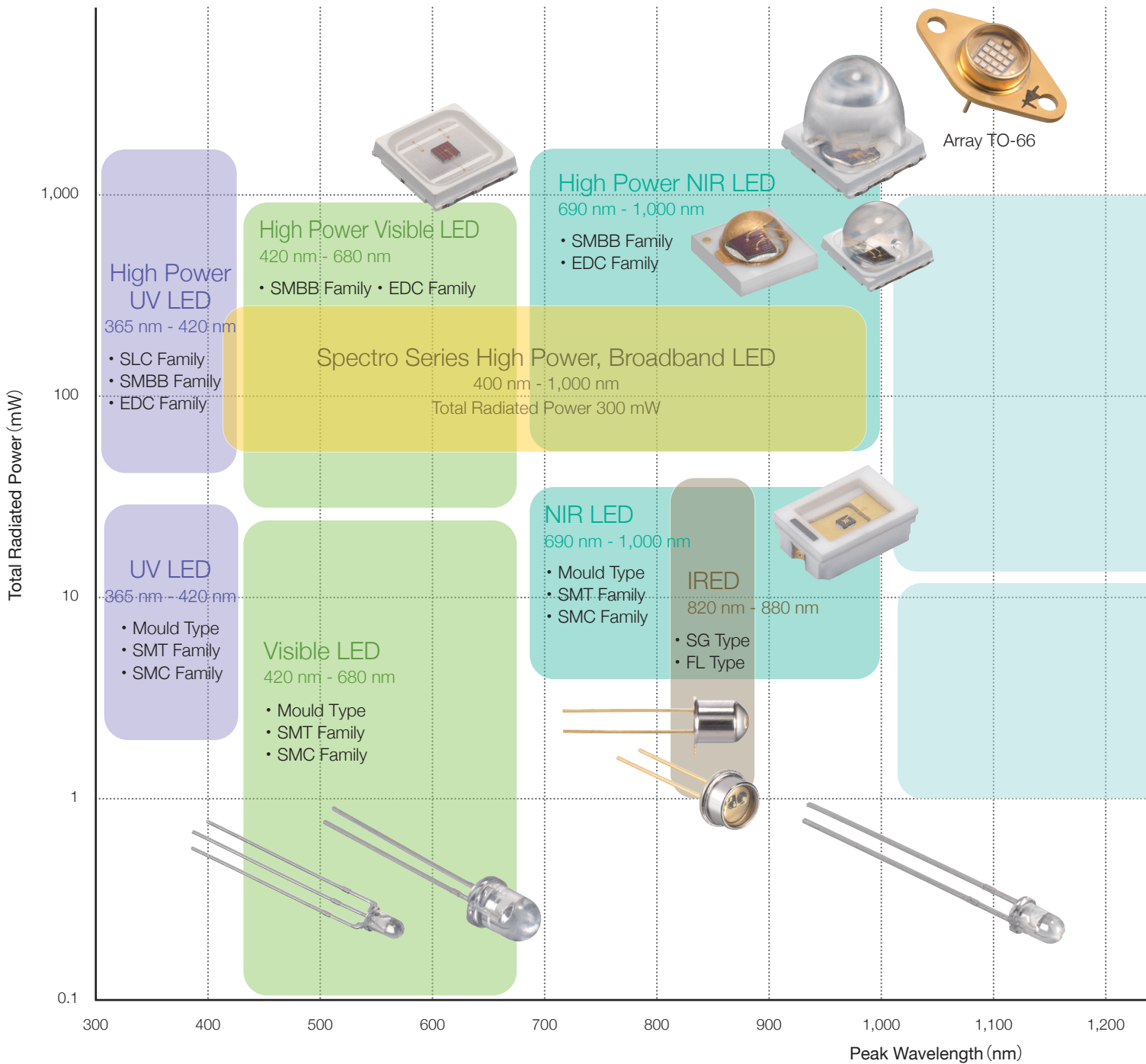
All wavelengths between 365 nm and 1,750 nm can be offered.



Covering all wavelengths in the ultraviolet (UV), visible, and infrared (IR) spectra, between 365 nm to 1,750 nm.

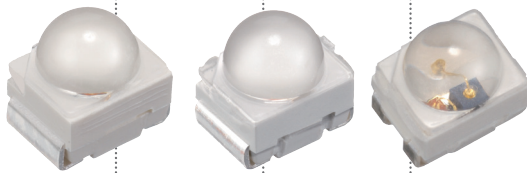
series

- ◆ Various models supporting all output ranges from low power to high power.
- ◆ Wide range of packages, suitable for your ideal optical design.
- ◆ We can also propose products that combine photosensors with LEDs.



**iRED**  
series

High output is achieved through the use of IRED's unique domed chip formation technology, and an excellent beam shape is provided by precision lens (package) design technology. The perfect light source collection for diverse applications such as CNC machine tools, robots, ophthalmoscopes, and position detection equipment.

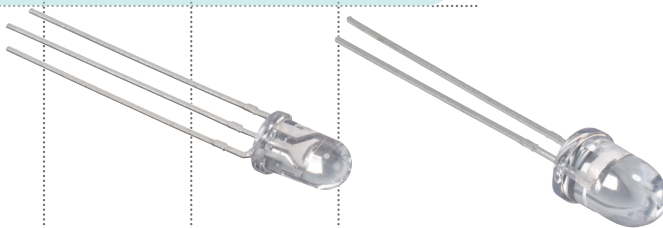


**High Power SWIR LED**  
1,000 nm - 1,750 nm

- SLC Family
- SMBB Family
- EDC Family

**SWIR LED**  
1,000 nm - 1,750 nm

- Mould Type
- SMT Family
- SMC Family



1,300      1,400      1,500      1,600      1,700      1,800







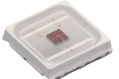
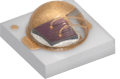


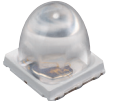
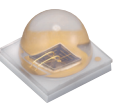








### 3 Various packages suitable for your optics

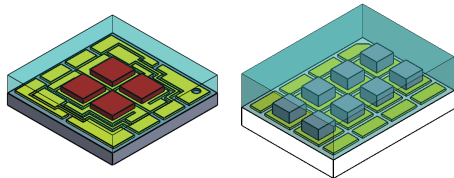
#### Single-chip package lineup

You can select your favourite LED package, from mould type to surface mounted, to suit your application, size, and viewing angle.

Chip Size	300 µm, 350 µm, 400 µm					500 µm, 600 µm	1 mm or more	
Output Power	Standard					Medium		
Lineup	epitex			iRED		iRED	epitex	
Package	Mould Type	SMC Family	SMT Family	FL Type	SG Type	SG Type	SMBB Family	EDC Family
								
								
								

#### Discover customised packages for a unique optical design

Please contact us if you cannot find your required LED package design. We are happy to recommend the optimal LED design based on the intended application.



## High Power TOP LEDs SMBB Family

**epitex** series



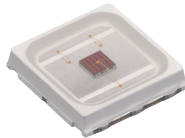
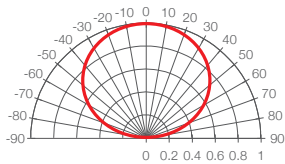
### Features

- ◆ All wavelengths between 365 nm and 1,650 nm can be offered
- ◆ High power TOP LEDs using 1 mm x 1 mm chip
- ◆ Package of 5 mm x 5 mm, equipped with copper heat sink
- ◆ Up to three 1 mm x 1 mm chips can be mounted in a single package

### Specifications [ e.g. SMBB760D series ]

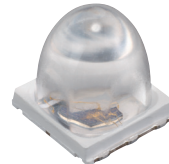
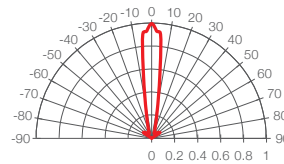
#### Flat Type

- ◆ Viewing Half Angle:  $\pm 64$  deg.



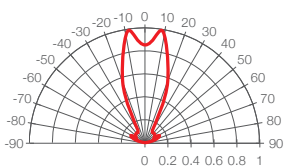
#### 02 Lens Type

- ◆ Viewing Half Angle:  $\pm 9$  deg.



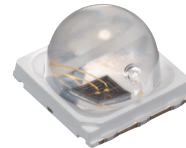
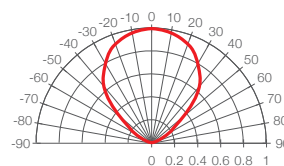
#### 03 Lens Type

- ◆ Viewing Half Angle:  $\pm 22$  deg.



#### 05 Lens Type

- ◆ Viewing Half Angle:  $\pm 45$  deg.



## High Power TOP LEDs EDC Family



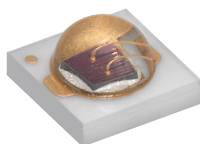
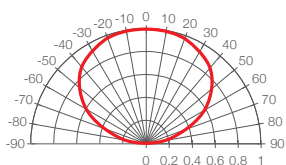
### Features

- ◆ All wavelengths between 365 nm and 1,650 nm can be offered
- ◆ High power TOP LEDs using 1 mm x 1 mm chip
- ◆ Ceramic Package of 3.5 mm x 3.5 mm

### Specifications [ e.g. EDC850DS series ]

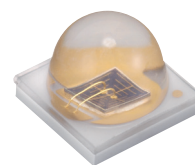
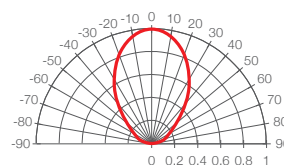
#### Flat Type

- ◆ Viewing Half Angle:  $\pm 66$  deg.



#### S5 Lens Type

- ◆ Viewing Half Angle:  $\pm 39$  deg.



## Surface Mount Type LEDs

# SMT Family

**epitex** series



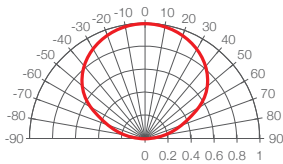
### Features

- ◆ All wavelengths between 365 nm and 1,650 nm can be offered
- ◆ Package dimension: 3.5 mm x 2.8 mm

### Specifications [ e.g. SMT780 series ]

#### Flat Type

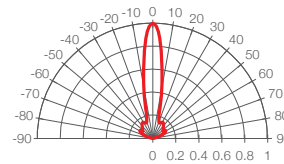
- ◆ Viewing Half Angle:  $\pm 62$  deg.



#### SMT with Silicone Lens

#### S1 Lens Type

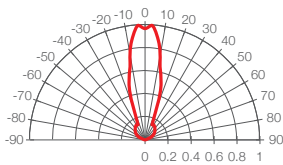
- ◆ SMT with Silicone Lens
- ◆ Viewing Half Angle:  $\pm 10$  deg.



#### SMT with Epoxy Lens (Available wavelengths: between 470 nm and 1,650 nm)

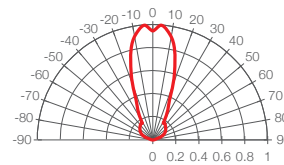
#### 23 Lens Type

- ◆ SMT with Epoxy Lens
- ◆ Viewing Half Angle:  $\pm 16$  deg.



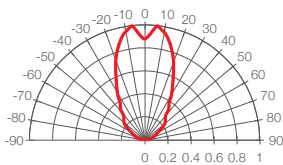
#### 25 Lens Type

- ◆ SMT with Epoxy Lens
- ◆ Viewing Half Angle:  $\pm 20$  deg.



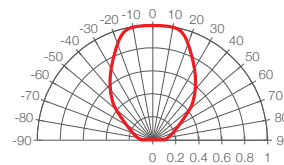
#### 27 Lens Type

- ◆ SMT with Epoxy Lens
- ◆ Viewing Half Angle:  $\pm 39$  deg.



#### 29 Lens Type

- ◆ SMT with Epoxy Lens
- ◆ Viewing Half Angle:  $\pm 45$  deg.



# Moulded Type

**epitex** series



## Features

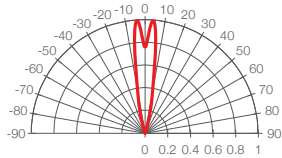
- ◆ Plastic Moulded Type LEDs

## Specifications [ e.g. L750-AU series ]

### 01 Lens Type



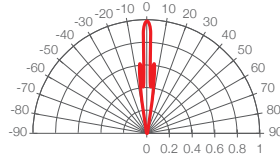
- ◆ Ø5 Plastic Moulded LED
- ◆ Viewing Half Angle: ±10 deg.



### 02 Lens Type



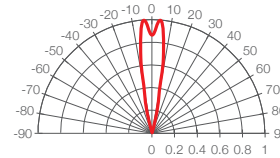
- ◆ Ø5 Plastic Moulded LED
- ◆ Viewing Half Angle: ±8 deg.



### 03 Lens Type



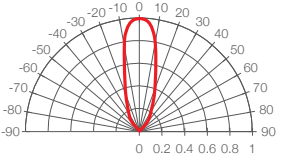
- ◆ Ø5 Plastic Moulded LED
- ◆ Viewing Half Angle: ±10 deg.



### 04 Lens Type



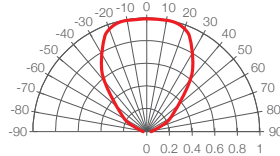
- ◆ Ø5 Plastic Moulded LED
- ◆ Viewing Half Angle: ±17 deg.



### 05 Lens Type



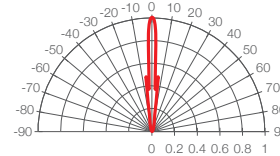
- ◆ Ø5 Plastic Moulded LED
- ◆ Viewing Half Angle: ±44 deg.



### 06 Lens Type



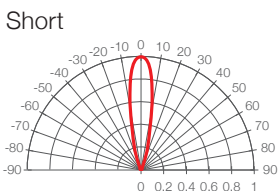
- ◆ Ø5 Plastic Moulded LED
- ◆ Viewing Half Angle: ±4 deg.



### 09 Lens Type



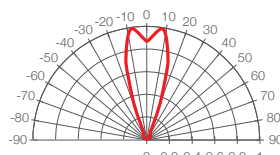
- ◆ Ø5 Plastic Moulded LED
- ◆ Viewing Half Angle:  
Short: ±10 deg. Long: ±21 deg.



### 33 Lens Type



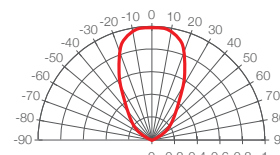
- ◆ Ø3 Plastic Moulded LED
- ◆ Viewing Half Angle: ±17 deg.



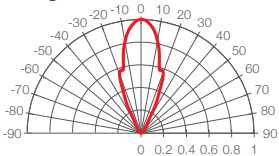
### 36 Lens Type



- ◆ Ø3 Plastic Moulded LED
- ◆ Viewing Half Angle: ±32 deg.



### Long



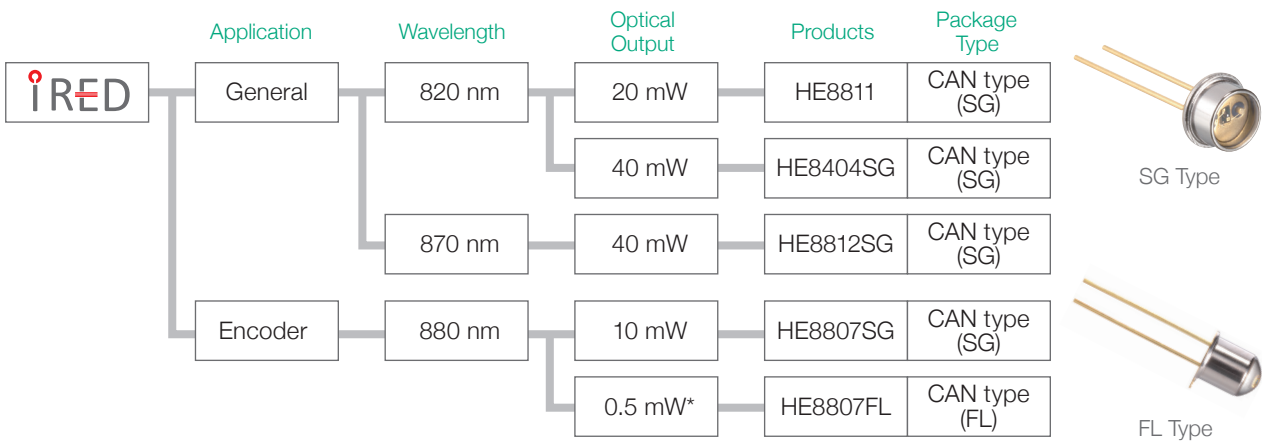
# IREN Series

## Features

- ◆ Achieves high optical power with unique domed chip formation technology
- ◆ 2 wavelength bands, 820 nm / 870 nm
- ◆ Set up options: SG type for a wide radiation beam and FL type for a collimated beam



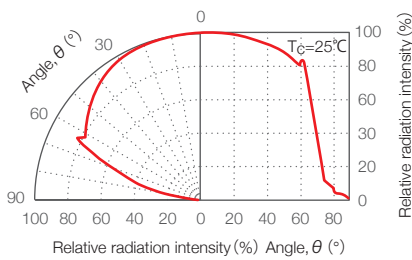
## IREN Product Lineup



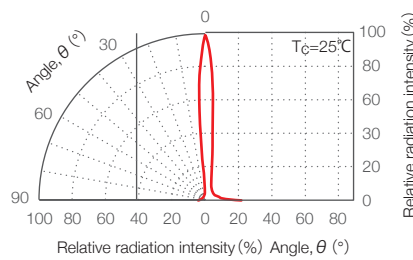
\* The optical output within 9 degrees of the acceptance angle.

## IREN Radiation Distribution

### SG Type



### FL Type



## IREN's Main Characteristics

Part No.	Absolute Maximum Rating		Optical and Electrical Characteristics											Test Conditions	
	Forward Current (mA)	Operating Temperature (°C)	Optical Output Power (mW)			Peak Wavelength (nm)			Spectral Width (nm)			Forward Voltage (V)			
			min.	typ.	max.	min.	typ.	max.	min.	typ.	max.	min.	typ.		max.
HE8811	200	-20 to 60	20	30	-	780	820	900	-	50	60	-	2.0	2.5	IF=150 mA
HE8404SG	250	-20 to 60	40	50	-	790	820	850	-	50	60	-	1.9	2.5	IF=200 mA
HE8812SG	250	-20 to 60	40	50	-	840	870	900	-	50	60	-	1.8	2.5	IF=200 mA
HE8807SG	200	-20 to 85	10	15	-	800	880	900	-	30	60	-	1.7	2.3	IF=150 mA
HE8807FL	200	-20 to 85	0.5*	1.0*	-	800	880	900	-	30	60	-	1.7	2.3	IF=150 mA

\* The optical output within 9 degrees of the acceptance angle.



Distributor



where technologies meet solutions

info@amstechnologies.com  
www.amstechnologies-webshop.com

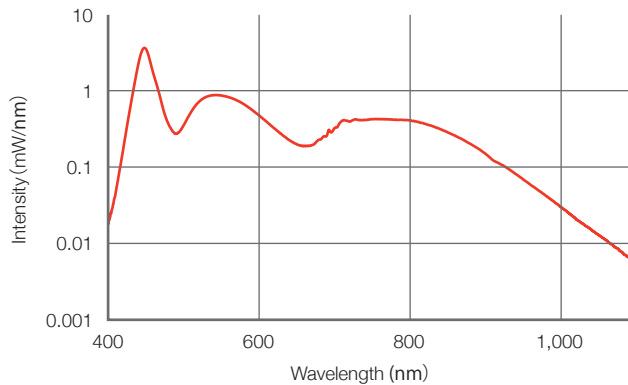
**Contact us** 

# Spectro Series



## Features

- ◆ Spectro is a series of high-output broadband LEDs capable of emitting visible to near infrared (NIR) wavelengths
- ◆ Spectro can be used in machine vision and analysis applications, such as measuring the sugar or fat content of foodstuffs



Total Radiated Power (typ) (λ = 400 nm - 500 nm)	140 mW (if 500 mA)
Total Radiated Power (typ) (λ = 500 nm - 1,000 nm)	160 mW (if 500 mA)

# Short Wavelength Infrared LEDs

## Features

- ◆ Epitex offers the world's highest output power in the SWIR LED class
- ◆ Standard centre wavelengths are 1,050, 1,100, 1,150, 1,200, 1,300, 1,450, 1,550, 1,650, and 1,750 nm
- ◆ We can also propose a unique wavelength selection according to the customer's required volume

