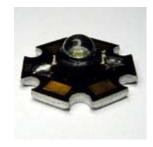
## High Power Emitter LED P/N: EF1R3EEC-1 (Red)



#### **ATTENTION**

OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



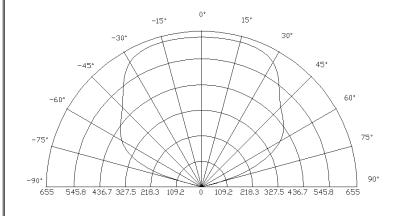
#### **Features**

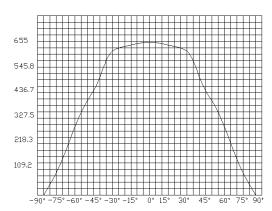
- Long operating life
- Highest flux
- Available in Red
- Lambertian radiation pattern
- More energy efficient than incandescent and most halogen lamps
- Low voltage DC operated
- Cool beam, safe to the touch
- Instant light (less than 100ns )
- Fully dimmable
- No UV
- Superior ESD protection
- Eutectic die bonding
- RoHS compliant

### **Applications**

- Reading lights (car, bus, aircraft)
- LCD Backlights/light Guides
- Fiber optic alternative/ Decorative / Entertainment
- Mini-accent/Up lighters/Down lighters/ Orientation
- Indoor/Outdoor commercial and
   Residential Architectural
- Cove/Under shelf/Task
- Bollards/Security/Garden
- Portable (flashlight, bicycle)
- Edge-lit signs (Exit, point of sale)
- Automotive Exit (Stop-Tail-Turn,CHMSL, Mirror Side Repeat)
- Traffic signaling / Beacons / RailCrossing and Wayside

#### **Radiation Pattern**







Under Development

Mass production

# High Power Emitter LED P/N: EF1R3EEC-1 (Red)

### Typical Optical/ Electrical Characteristics @T<sub>J</sub>=25℃

Item	Symbol	Condition	Min.	Тур.	Max.	Unit	
Forward Voltage	$V_{F}$	IF=800mA	2.0		2.8	V	
Reverse Current	I <sub>R</sub>	VR=5v			50	uA	
50% Power Angle	201/2	IF=800mA	110		140	deg	
Luminous Intensity	φν	IF=800mA	67.2	76.6		lm	
Recommend Forward Current	I <sub>F</sub>			800		mA	
Wave Length	$\lambda_{d}$	IF=800mA	620		630	nm	
Thermal Resistance, Junction to Case	RJP	IF=800mA		10		°C/w	
The sample delivers goods data							
Item	Symbol	Condition	Min.	Avg.	Max.	Unit	
Luminous Intensity	φν					lm	
50% Power Angle	201/2	IF-000m A				deg	
Forward Voltage	$V_{F}$	IF=800mA				٧	
Wave Length	$\lambda_{d}$					nm	

#### 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	I <sub>F</sub>	800	mA		
Peak Forward Current*	I <sub>FP</sub>	1000	mA		
Reverse Voltage	$V_R$	5	V		
Power Dissipation	$P_D$	3000	mW		
Electrostatic discharge	E <sub>SD</sub>	±2000	V		
Operation Temperature	T <sub>OPR</sub>	-40~+80	$^{\circ}\!\mathbb{C}$		
Storage Temperature	T <sub>STG</sub>	-40~+100	$^{\circ}$ C		
Lead Soldering Temperature*	T <sub>SOL</sub>	Max. 260°C for 3sec Ma	Max. 260℃ for 3sec Max.		

<sup>\*</sup>IFP 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.

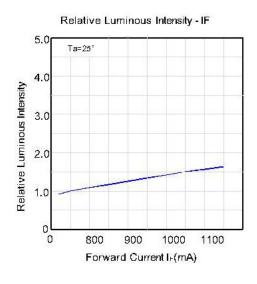


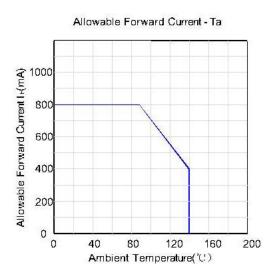
Under Development

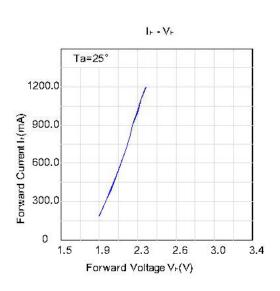
Mass production

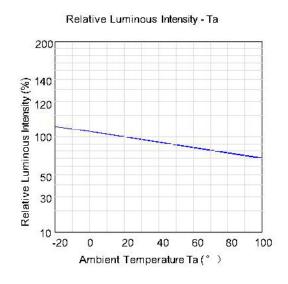
# High Power Emitter LED P/N: EF1R3EEC-1 (Red)

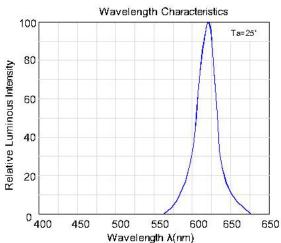
# Typical Optical/Electrical Characteristics Curves ( $T_J$ =25°C Unless Otherwise Noted )











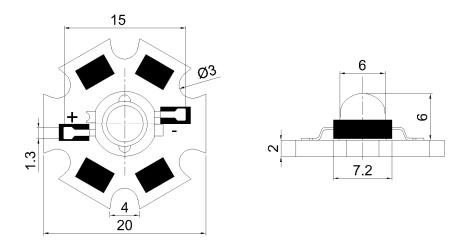


Under Development

Mass production

# High Power Emitter LED P/N: EF1R3EEC-1 (Red)

### **Package Dimensions**

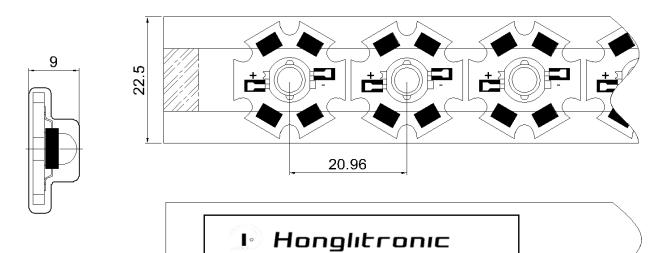


#### Notes:

- 1. All dimension units are millimeters.
- 2. All dimension tolerance is ±0.2mm unless otherwise noted.

TYPE: QTY: LOT NO:

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



TC:

Фv: