



# Microtex Electronics

## M587 Assembly



**M587**

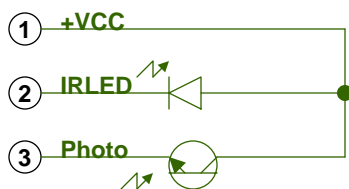
- Replacement for GE A587 Optical Assembly.
- Industrial Temperature Grade  $-40^{\circ}$  to  $+85^{\circ}$  C
- Aircraft Quality Unbreakable Polycarbonate
- Flat front face has no plastic posts or dead spots for superior magnetic adhesion.
- Plated for corrosion-free performance
- Impregnated Lens protects optical components
- 11/16-20 Threaded Housing for panel mounting
- Superior Optical characteristics
- Comes with Industrial grade locking header for positive vibration-free connection.
- Neoprene Cork Washers for watertight sealing
- Military Grade Teflon Wiring and Shield

### Description:

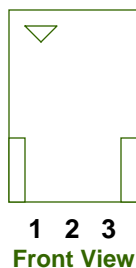
### Body -

The M587 is a Superior Replacement for the GE A587 Assembly which is made from polystyrene plastic, and is not sealed from weather, water, and humidity. The M587 is made from indestructible polycarbonate material and has a superior plated Stainless Steel full-face magnetic adhesion surface. Behind the Plated stainless steel face, the M587 has a polycarbonate impregnated lens assembly. This lens is totally waterproof. This unit will operate in high humidity levels. The body is made from indestructible polycarbonate that will not warp and can withstand high temperature environments. The body will not crack, warp, or lose it's properties even during the most demanding use. The threads made from the body are 11/16 heavy threads. Two Neoprene cork washers are included and stainless steel washer ring. All environmental sealing washers are included, and a galvanized plated 11/16-20 thread nut. This unit also comes with our best optical components installed on it's own circuit board.

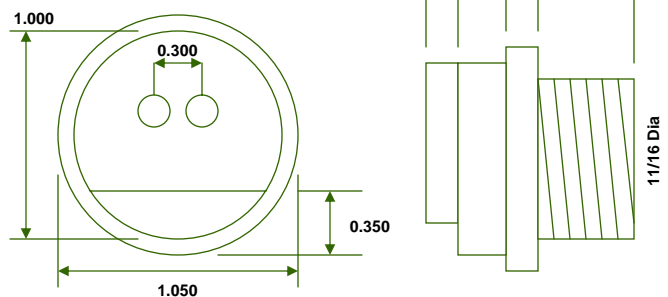
### Electrical Schematic-



### Connector End -



### Mechanical -



**Flexible • Rugged Environments • Proven Reliability**

### For More Information:

Microtex Electronics, Inc.  
 3400 North Central Expressway, Ste 256  
 Richardson, TX, 75080 U.S.A.  
 Tel: (972) 479-1011  
 Fax: (972) 479-1015  
[www.microtexelectronics.com](http://www.microtexelectronics.com)

Proudly Made in the USA



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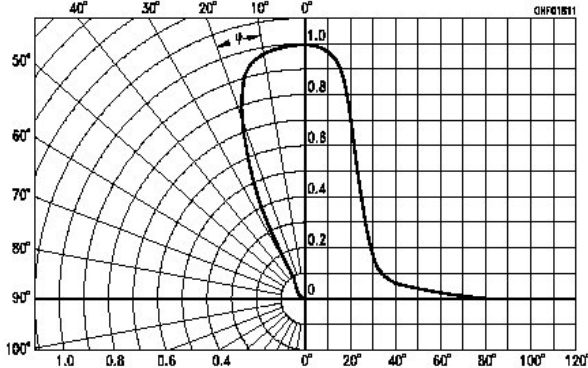
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## M587 Assembly

### Phototransistor Specs:

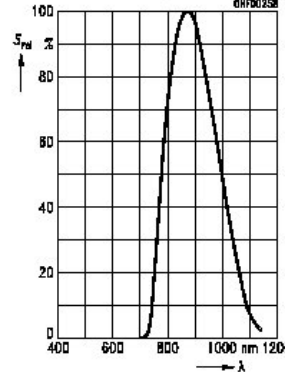
#### Directional Characteristics

$$S_{rel} = f(\varphi)$$



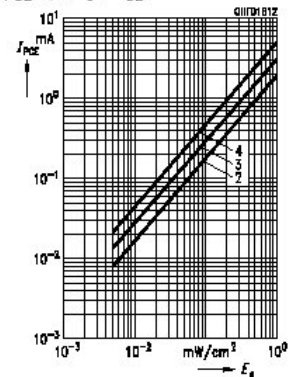
#### Relative Spectral Sensitivity, SFH 300 FA

$$S_{rel} = f(\lambda)$$



#### Photocurrent

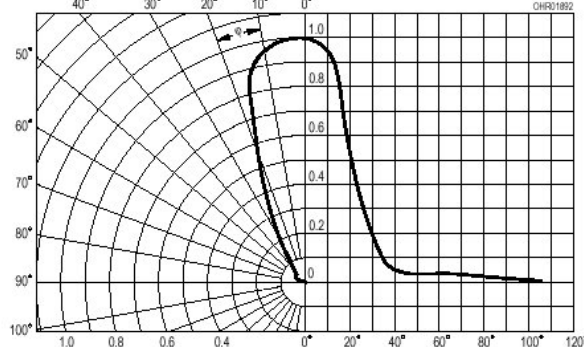
$$I_{PCE} = f(E_e), V_{CE} = 5 V$$



### Infrared LED Specs:

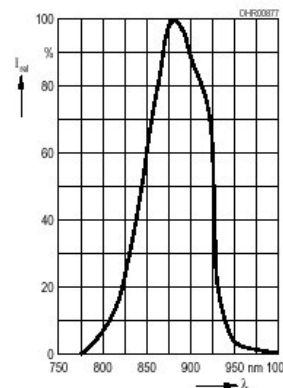
#### Radiation Characteristics SFH 485

$$I_{rel} = f(\varphi)$$



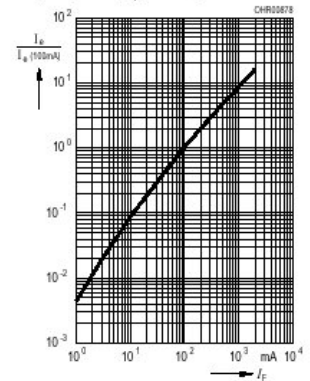
#### Relative Spectral Emission

$$I_{rel} = f(\lambda)$$



#### Radiant Intensity $\frac{I_e}{I_e(100mA)} = f(I_e)$

Single pulse,  $t_p = 20 \mu s$



### Environmental Specs:

Temperature	-40 to -85c
Humidity	95% (Sealed Lens)
Vibration	Mil Std 810
Drop Test	IEC 601-2

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