# **Infrared Emitting Diodes**

These diodes are used in remote controls, photo detectors, smoke detectors, etc.

### 3 mm (T-1) @ 50ma

Max Forward Typical Viewing Voltage Number Voltage Angle 1.4V 11-680 1.6V 30°

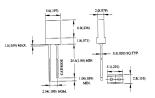
### 5 mm (T-1 3/4) @ 50 ma

Max Forward Typical Number Voltage Voltage Angle 11-681 1.6V 1.4V 45°

# Rectangular LED's

#### 2 mm X 5 mm X 7 mm

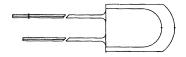
Part Number	Foreward Current (I <sub>f</sub> ) ma	Max Forward Voltage	Typical Voltage	LED Color	Viewing Angle
11-642	20 ma	2.0V	1.7V	Red	120°
11-643	20 ma	2.6V	2.0V	Orange	120°
11-644	20 ma	2.6V	2.1V	Yellow	120°
11-645	20 ma	2.6V	2.2V	Green	120°



#### Square LED's

#### 8 mm X 8 mm X 12 mm

Part	Foreward	Max Forward	Typical	LED	Viewing
Number	Current (I <sub>f</sub> ) ma	Voltage	Voltage	Color	Angle
11-632	20 ma	2.6V	2.2V	Bright Red	140°
11-633	20 ma	2.6V	2.0V	Bright Orange	140°
11-635	20 ma	2.6V	2.2V	Bright Green	140°





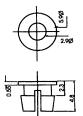
### **Press in Holders**

Press to fit holders, hold flangeless LED's snuggly into mounting

No. 11-400 3 mm LED (5.5 mm hole) No. 11-401

5 mm LED (6.2 mm hole) No. 11-404

5 mm LED (6.2 mm hole) with lamp support

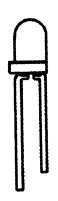


#### Silicon Photo Transistors

These devices are an electronic switch. When this unit is activated current is allowed to flow through the device. These items are used in Optical encoders, Automatic Control Systems, Photo Detectors and other applications where an optical switch is needed.

#### 3 mm (T-1)

Part	Max Breakdown	Typical	Typical Carry	Viewing		
Number	Voltage	Voltage	Current	Angle		
11-690	30V	5V	20 ma	30°		
5 mm (T-1 3/4)						
Part	Max Breakdown	Typical	Typical Carry	Viewing		
Number	Voltage	Voltage	Current	Angle		
11-691	30V	5V	20 ma	35°		



## 90° Surface Mt. **Holders**

Mount LED's at 90° to PCBoards

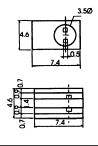
No. 11-409 3 mm Single No. 11-410 5 mm Single No. **11-412** 

5 mm Dual

Bi-Polar 8 mm LED

Lamps are in a recessed chrome bezel which holds a 8 mm LED that operates

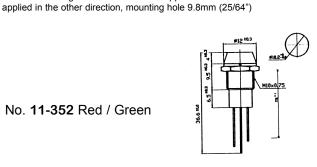
at 2V. The LED glows Red if current is applied in one direction and Green if



# 5 mm LED Lamp Holder

The holders hold a 5 mm LED (T-1 3/4). They are a chrome recessed style holder which mounts into a 7.9mm (5/16") hole with a hex nut

No. 11-352 Red / Green



No. 11-480