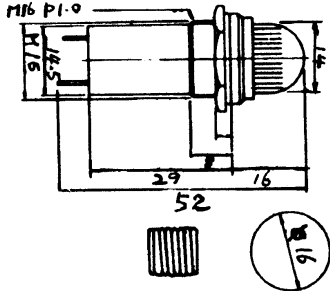


PANEL LAMPS & LED's

Miniature Screw Base Lamp Holder

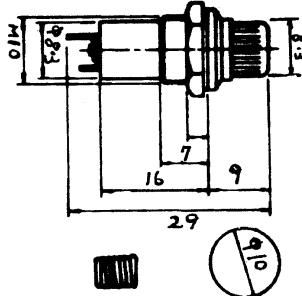
These lamp holders can house a standard miniature screw based lamp. They have a dome lens and mount into a 16 mm mounting hole.



- No. 11-522 Red
- No. 11-523 Orange
- No. 11-525 Green

Midget Screw Base Lamp Holder-Flat Lens

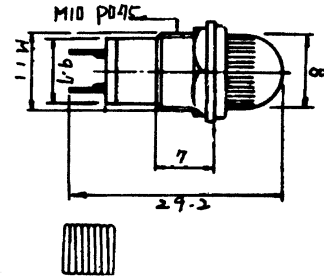
Lamp holders for midget screw based lamps. They have a 9 mm high flat lens and mount into a 10 mm hole.



- No. 11-512 Red
- No. 11-513 Orange
- No. 11-515 Green

Midget Screw Base Lamp Holder-Dome Lens

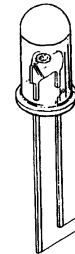
Lamp holders for midget screw based lamps. They have a 9 mm high dome lens and mount into a 10 mm hole.



- No. 11-552 Red
- No. 11-553 Orange
- No. 11-555 Green

LED's

The LED (light emitting diode) offered in this section are without mounting hardware, or discrete devices. The LED consists of four components: a lead frame, a dice (or LED chip), and a fine wire bond which is encapsulated in an epoxy base. (see Below) Depending on the chip used, the observer will see a monochromatic red, green, orange, yellow or blue light. There are no moving parts, so these devices are considered a "solid state device". The LED's operate on from 1.7V-2.5V if you need the lamp to operate at a higher voltage a current limiting resistor is needed. The value of the resistor will vary depending upon the desired voltage and whether it is AC or DC volts. Each color of LED works at a different operating current which will change the value of the resistor.



3 mm (T-1) Round LED's

Part Number	Forward Current (I _f) ma	Max Forward Voltage	Typical Voltage	LED Color	Viewing Angle
11-602	20 ma	2.0V	1.7V	Red	35°
11-604	20 ma	2.6V	2.1V	Yellow	35°
11-605	20 ma	2.6V	2.2V	Green	35°



5 mm (T-1 3/4) Round LED's

Part Number	Forward Current (I _f) ma	Max Forward Voltage	Typical Voltage	LED Color	Viewing Angle
11-611	20 ma	2.0V	1.7V	Red	35°
11-612	20 ma	2.6V	2.2V	Bright Red	35°
11-614	20 ma	2.6V	2.1V	Yellow	35°
11-615	20 ma	2.6V	2.2V	Green	35°



12 mm Round LED's

Part Number	Forward Current (I _f) ma	Max Forward Voltage	Typical Voltage	LED Color	Viewing Angle
11-662	20 ma	2.6V	2.2V	Bright Red	50°
11-663	20 ma	2.6V	2.0V	Orange	50°
11-664	20 ma	2.6V	2.1V	Yellow	50°
11-665	20 ma	2.6V	2.2V	Green	50°



Blinking LED's

All of these devices operate @ 25 ma, 3 - 10V DC and are typically driven by TTL or C-MOS circuits with no external circuit needed.

5mm (T-1 3/4)

Part Number	Pulse Rate (VDD=5V)Hz	LED Color	Viewing Angle	Luminous Intensity
11-672	2.4V	Bright Red	45°	12.0
11-674	2.4V	Yellow	45°	35.0
11-675	2.4V	Green	45°	40.0

