



Sealed lampholders

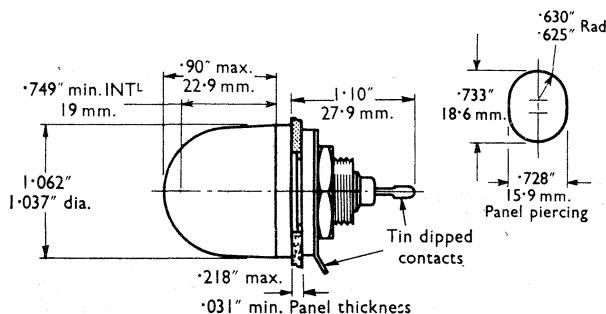
Qualification approval to DEF 5201

These lampholders are designed primarily for use in sealed radio and electronic equipment for reliability under the severe conditions of service required by Services specification DEF 5201. Reliable sealing of the lampholders, unaffected by elevated temperatures, is achieved by means of ceramic-to-metal seals, and lamps may be renewed without breaking the seal to the equipment. In each case the connections are insulated from the mounting panel. Both the LH21, which accommodates MES

lamps, and the LH23 using Midget flange lamps S6/8, are supported by a range of caps fitted with glass or alkyd lenses in a wide range of colours. This range includes dimming caps which vary illumination from maximum to zero by manual rotation of the cap through 60°, and for the LH23 style special caps to accommodate long neon lamps. On the LH23 body the lamp centre contact is coded red for identification when using neons.

Ordering information LH21 sealed lampholder

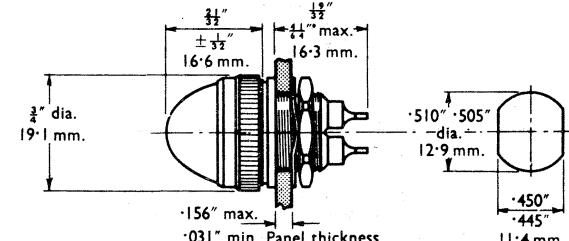
| Description | Plessey Part No. | J.S. REF. |
|-----------------------------|------------------|-----------|
| | | 6210-99- |
| Body assembly | 418/1/05503 | 011-9194 |
| Lens & Bezel, frosted glass | | |
| Clear | 418/4/05037/011 | 012-2899 |
| " " Red | 012 | 012-2893 |
| " " Green | 013 | 012-2895 |
| " " Blue | 016 | 012-2896 |
| " " Yellow | 017 | 012-2894 |
| " " Orange | 018 | 012-2897 |



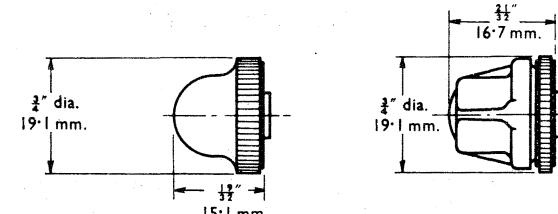
LH21 Glass lens shown with body assembly.

Ordering information LH23 sealed lampholder

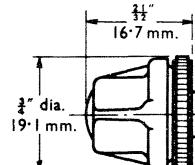
| Description | Plessey Part No. | J.S. REF. |
|----------------------------|------------------|-----------------|
| | | 6210-99- |
| Body Assembly | 418/1/05507 | 012-0913 |
| Lens, Frosted Glass, Clear | 418/1/05000/011 | 012-7427 |
| " " Red | 012 | 012-7421 |
| " " Green | 013 | 012-7423 |
| " " Blue | 016 | 012-7424 |
| " " Yellow | 017 | 012-7422 |
| " " Orange | 018 | 012-7425 |
| Lens cap, Alkyd | Red | 418/1/05508/001 |
| " " Amber | 002 | 943-7804 |
| " " Green | 003 | 943-7808 |
| Dimmer cap, Alkyd, Red | 418/1/05510/001 | 012-0914 |
| " " Green | 002 | 012-0916 |
| " " Amber | 003 | 012-0915 |
| Lens cap, long neon, Clear | 418/1/05003 | 580-0610 |



LH23 Glass lens cap shown with body assembly



LH23 plain alkyd lens cap



LH23 Alkyd dimmer cap


Light, indicator, sealed—style M10, to DEF 5201

The miniature Indicator Light, Style M10, has been designed primarily for use in sealed radio and electronic equipment for reliability under the severe conditions required by the Services Specification DEF 5201.

Glass-to-metal sealing is unaffected within the temperature range -55°C to $+100^{\circ}\text{C}$ and the lamp may be replaced without breaking the seal to the equipment.

Glass lenses, tested to DEF 5201, are available in the following colours; GREEN, RED, YELLOW, BLUE, ORANGE, CRYSTAL & FROSTED CRYSTAL.

STANDARD SPECIFICATION
Working Voltage;

- a. 50V d.c. between terminations.
- b. 150V d.c. terminations to earth.

Light Transmission;

To DEF 5021, no significant deterioration after 2000 hours endurance test.

Torque;

| | |
|--------|--------------------|
| Lens | 0.56 Nm (5 lbf in) |
| Fixing | 0.90 Nm (8 lbf in) |

Insulation Resistance;

Initially and after all other tests.

- a. 10 megohms between terminations.
- b. 500 megohms terminations to earth.

After Final Damp Heat Cycle or Tropical exposure after 2 hours.

- a. 1 megohm between terminations.
- b. 50 megohms terminations to earth.

After 24 hours recovery

- a. 10 megohms between terminations.
- b. 100 megohms terminations to earth.

Panel thickness;

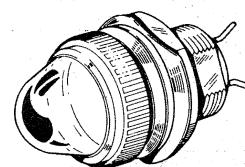
0.8 mm ($\frac{1}{32}$ "") min. 3.2 mm ($\frac{1}{8}$ "") max.

Sealing;

Rate of leakage not greater than 1 cc per hour at a pressure of one atmosphere.

Lamps & Rating;
 Subminiature capped lamp 6V, 12V or 28V 0.5W of the T1 Wheater Type (similar to NATO Stock number 6240-99-995-1198).

Temperature Category;
 Light Indicator and glass lens -55°C to $+100^{\circ}\text{C}$.



The Miniature Indicator Light

MATERIALS
BODY;

Dural to BS 1476 hard anodised (natural) to DEF 151

NUT;

Dural, hard anodised (natural) to DEF 151.

WASHER;

Beryllium copper cad. plate to DTD 904, passivate to DEF 130.

LENS HOUSING;

Brass, to DTD 627, DNP to DTD 919.

LENS;

Glass (Green, Red, Yellow, Blue, Orange, Crystal and Frosted Crystal).

CONNECTING PINS;

Tinned

PANEL SEAL;

Nitrile, Synthetic Rubber.

LENS-HOUSING SEAL;

Nitrile, Synthetic Rubber.



Light, indicator, sealed—style M10, to DEF 5201 (cont.)

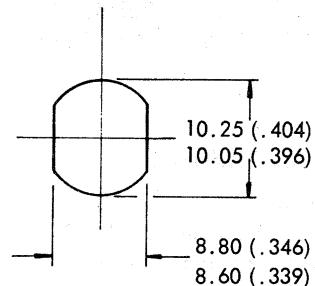
ORDERING INFORMATION

To order supplies of the M10 sealed Indicator Light and/or lenses it is sufficient to quote the Part No. given in the table below.

| Description | Part Number |
|--|-----------------|
| Light, Indicator, without lens | 418/1/05022 |
| Light, Indicator, c/w Green lens | 418/1/05021/001 |
| Light, Indicator, c/w Red lens | 418/1/05021/002 |
| Light, Indicator, c/w Yellow lens | 418/1/05021/003 |
| Light, Indicator, c/w Blue lens | 418/1/05021/004 |
| Light, Indicator, c/w Crystal lens | 418/1/05021/005 |
| Light, Indicator, c/w Orange lens | 418/1/05021/006 |
| Light, Indicator, c/w Frosted crystal lens | 418/1/05021/007 |
| Lens, Green | 418/1/05521/001 |
| Lens, Red | 418/1/05521/002 |
| Lens, Yellow | 418/1/05521/003 |
| Lens, Blue | 418/1/05521/004 |
| Lens, Crystal | 418/1/05521/005 |
| Lens, Orange | 418/1/05521/006 |
| Lens, Frosted crystal | 418/1/05521/007 |
| Lamp Removal Tool | 418/1/06603 |

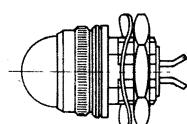
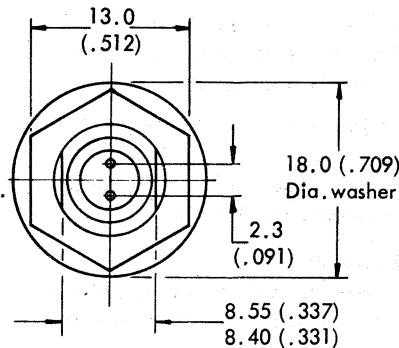
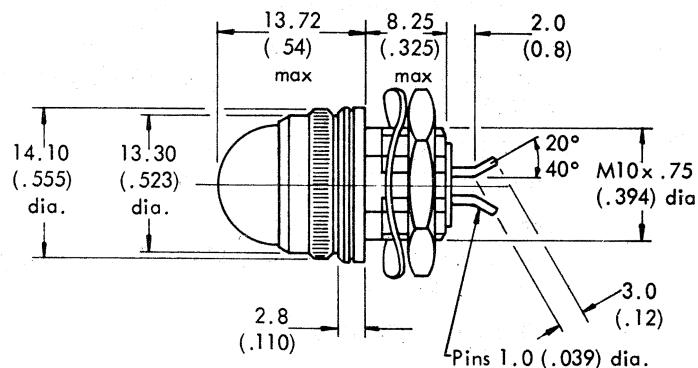
NOTES; Also available

1. A sealed dimmer cap suitable for aircraft applications.
2. A plastic lens for less critical environmental conditions
3. A clip-on directional hood

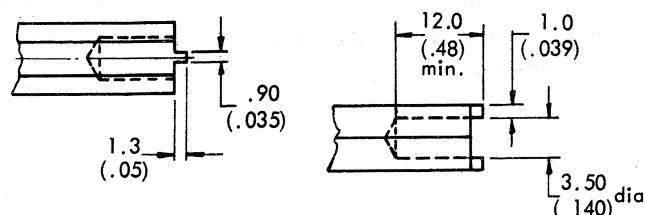


PANEL PIERCING

All dimensions are in millimetres (inches)



SCALE Approx. Actual Size



REMOVAL TOOL



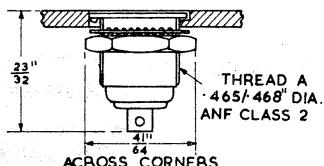
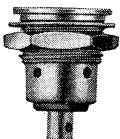
Midget lampholder bases

Developed for T-1 $\frac{1}{4}$ (S6s/8) Midget flange cap lamps, the lampholder bases illustrated may be used with a number of lampholders and caps shown on the following pages. Small locating keys prevent rotation of the bases when

mounted in the panel.

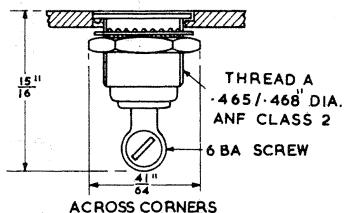
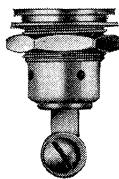
In the interests of economy, one lampholder is now being manufactured in each style. These bases provide maximum thread length for panel mounting.

Solder terminal base, earthed

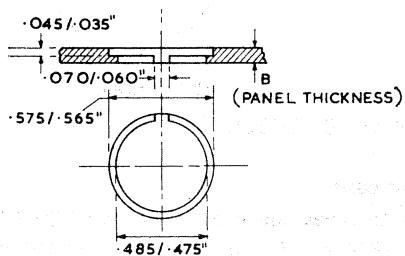


| Base | Thread A | Panel thickness B | |
|----------|----------|-------------------|-------|
| Part no. | length | min. | max. |
| 02-0081 | .437" | .064" | .320" |

Screw terminal base, earthed



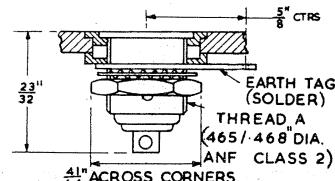
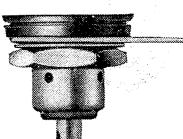
| Base | Thread A | Panel thickness B | |
|----------|----------|-------------------|-------|
| Part no. | length | min. | max. |
| 02-0083 | .437" | .064" | .320" |



Installation of earthed types

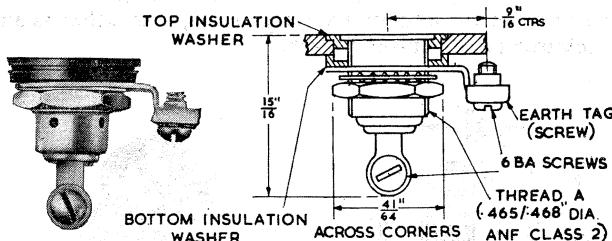
Thorn Bendix Ltd
Miniature lamps:
refer to lamp section.

Solder terminal base, insulated

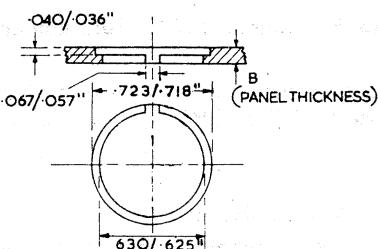


| Base | Thread A | Panel thickness B | |
|----------|----------|-------------------|-------|
| Part no. | length | min. | max. |
| 02-0082 | .437" | .064" | .230" |

Screw terminal base, insulated



| Base | Thread A | Panel thickness B | |
|----------|----------|-------------------|-------|
| Part no. | length | min. | max. |
| 02-0084 | .437" | .064" | .230" |



Installation of insulated types

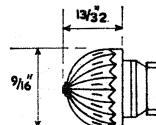
Earth tags and insulation washers are available as separate items:

Top insulation washer 02-1382
Bottom insulation washer 02-1383



Indicator caps

Brilliant illumination is provided by the faceted cap and allows the indicator to be seen from any angle. These indicators have metal shanks and they cannot be used for trans-illumination of legends in 'Plasteck' panels.

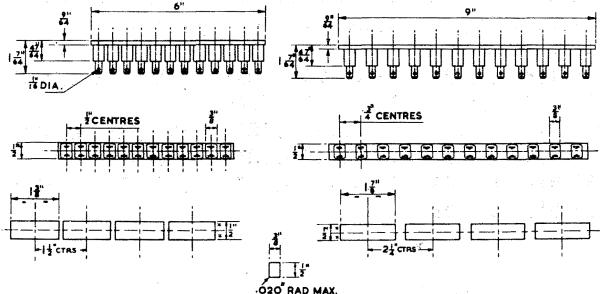
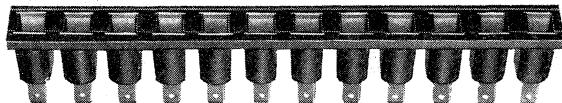




Multi-socket indicator strip

Multi-socket Indicators are produced in strips of twelve sockets on either $\frac{1}{2}$ in or $\frac{3}{4}$ in centres. They can be cut by the user to give shorter lengths as desired, or used end-to-end to obtain longer strips. They are easily mounted, using 3 Simmonds Spire Nuts as a minimum per strip. Single sockets are also available and can be used separately, or in conjunction with the above indicator strips. Installation is by a panel mounting hole measuring $\frac{1}{2} \times \frac{3}{8}$ in in size.

T-2 Slide Base Lamps are used with small plastic caps in several bright colours—details are given below—order separately.

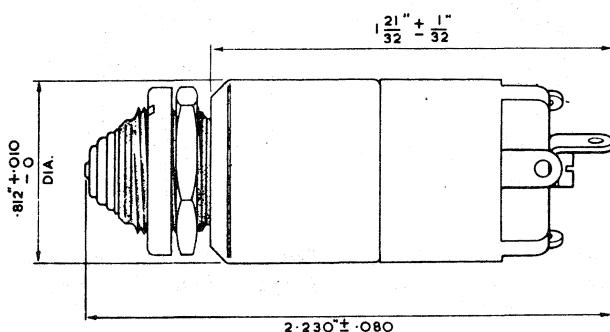
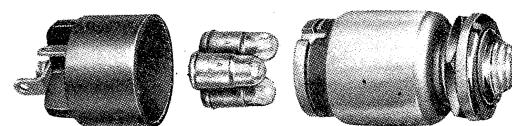
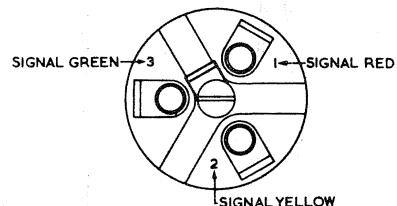
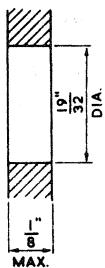


Part numbers: Multi-socket strip ($\frac{1}{2}$ ctrs): 80/10/2062/S
 Multi-socket strip ($\frac{3}{4}$ ctrs): 80/10/2063/S
 Single socket: 80/10/2064/S
 Simmonds spire nuts 80/10/2067/

Three colour indicator

The Three Colour Indicator is suitable for a wide variety of signalling applications where space saving is an important factor.

Three internal coloured filters, optically positioned, project the selected colour through the front glass lens which has a ribbed surface for maximum indication. The internal filters are glass to specification BS 1376: Signal Red class "A" Signal Green class "A" and Signal Yellow class "B2".



Part numbers: Solder terminals: 02-0010/C
 Screw terminals: 02-0011/C
 Lamps: use T-1 1/4 (S6s/8) Midget flange cap types up to 2W.
 The indicators are supplied without lamps. These should be ordered separately to suit individual requirements.

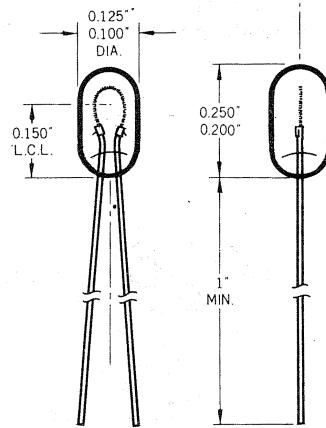


Nato Stock Numbers – Miniature lamps

| 6240-99- TBL | 6240-99- TBL | 6240-99 TBL |
|-----------------|-----------------|-----------------|
| 995-1189 L.1122 | 995-9120 L.1003 | 995-9178 L.1018 |
| 995-1198 L.1123 | 995-9122 L.1006 | |
| 995-1230 L.1094 | 995-9125 L.1001 | 995-9215 L.1093 |
| 995-1286 L.1112 | 995-9135 L.1014 | 996-9213 L.1045 |
| 995-9118 L.1004 | 995-9174 L.1020 | 996-9215 L.1016 |
| 995-9119 L.1002 | | |

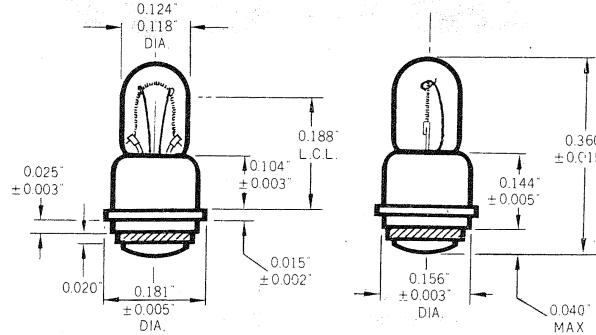
T-1 Wire terminal lamps

Intended for mounting directly to a circuit by soldering or welding, or for potted application where appropriate lamps can be supplied to the requirements of BS.2G.181.



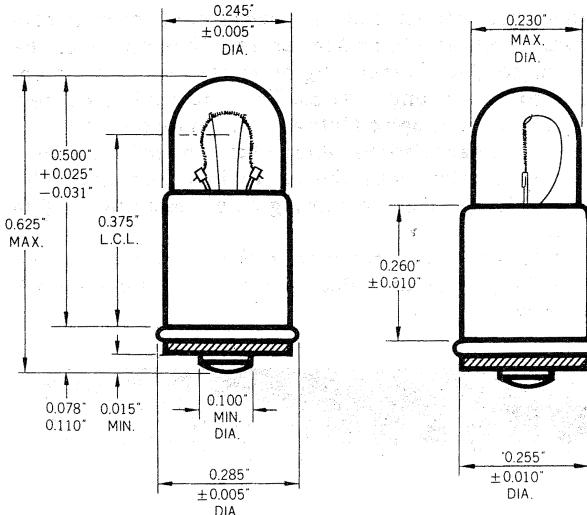
| Part No. | U.S. Trade Ref. | Design Volts | Design Amps | Nominal M.S.C.P. | Nominal Lumens |
|----------|-----------------|--------------|-------------|------------------|----------------|
| L.1122 | 683 | 5 | .06 | .053 | .66 |

T-1 (S3s) Sub-midget flange cap lamps



| Part No. | U.S. Trade Ref. | Design Volts | Design Amps | Nominal M.S.C.P. | Nominal Lumens |
|----------|-----------------|--------------|-------------|------------------|----------------|
| L.1123 | 685 | 5 | .06 | .053 | .66 |

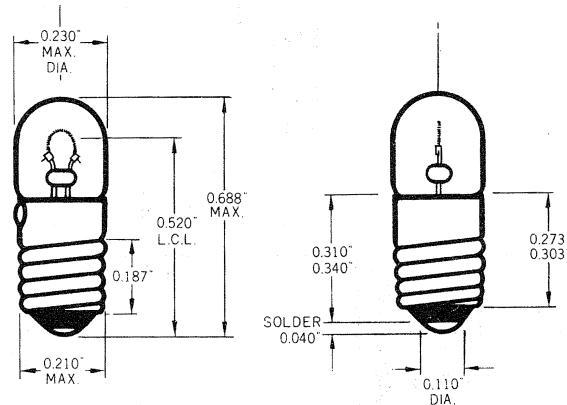
T-1 $\frac{3}{4}$ (S6s/8) Midget flange cap lamps



| Part No. | U.S. Trade Ref. | Design Volts | Design Amps | Nominal M.S.C.P. | Nominal Lumens |
|----------|-----------------|--------------|-------------|------------------|----------------|
| L.1001 | — | 4 | .26 | .338 | 4.25 |
| L.1002 | — | 6 | .10 | .19 | 2.4 |
| L.1014 | 328 | 6 | .20 | .62 | 7.8 |
| L.1069 | — | 12 | .04 | .08 | 1.0 |
| L.1003 | — | 12 | .10 | .48 | 6.0 |
| L.1068 | 330 | 14 | .08 | .60 | 7.5 |
| L.1338 | 387 | 28 | .04 | .30 | 3.77 |
| L.1004 | 327 | 28 | .04 | .34 | 4.27 |
| L.1006 | — | 28 | .08 | .80 | 10 |

T-1 $\frac{3}{4}$ (E5/8) L.E.S. cap lamps

Small indicator lamps with L.E.S. caps ideally suitable for a wide variety of applications in general industry.



| Part No. | U.S. Trade Ref. | Design Volts | Design Amps | Nominal M.S.C.P. | Nominal Lumens |
|----------|-----------------|--------------|-------------|------------------|----------------|
| L.1064 | 335 | 28 | .04 | .34 | 4.27 |

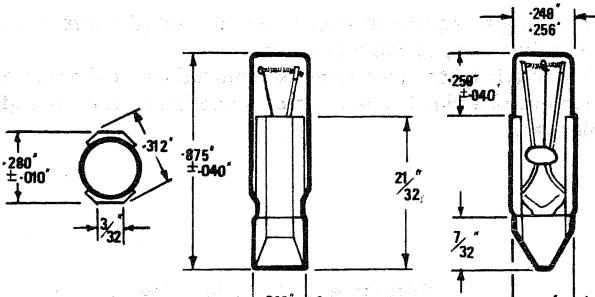

T-2 Slide base lamps

The slide base increases the holding surface area, resulting in a positive electrical contact and ensuring optimum lamp performance even under shock and vibration conditions.

Two nickel plated contacts are cemented to the sides of the glass bulb and embedded in a moulded nylon base. Working temperature of the base material is -55 to +190 °C.

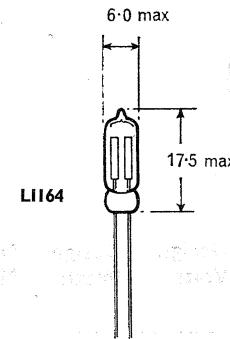
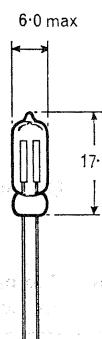
| Part No. | U.S. Trade Ref. | Design Volts | Design Amps | Nominal M.S.C.P. | Nominal Lumens |
|----------|-----------------|--------------|-------------|------------------|----------------|
|----------|-----------------|--------------|-------------|------------------|----------------|

| | | | | | |
|--------|-------|----|-----|------|------|
| L.1019 | 6ESB | 6 | .04 | .04 | .50 |
| L.1020 | 12ESB | 12 | .04 | .127 | 1.6 |
| L.1157 | 18ESB | 18 | .04 | .11 | 1.38 |
| L.1018 | 28ESB | 28 | .04 | .19 | 2.4 |


T-2 Neon lamps, wire terminal

Ideal for use as indicators in a wide range of electrical appliances and switches, these lamps are designed to be interchangeable with similar types of British and American origin.

By virtue of their long life without sudden failure, they may be permanently wired in position. Suitable for operation on all mains voltages, their main features are reliability, negligible current consumption and the absence of heat. All types require an externally connected series resistor and values recommended are consistent with good light output and long life. The resistor value is not critical and a 20% tolerance is quite adequate.



(Dimensions in mm)

| Operating voltage | Low brightness types | | | | High brightness types | | | |
|--|----------------------|------------------|------------------|------------------|-----------------------|------------------|------------------|------------------|
| | a.c. 100-120V | a.c. 220-250V | d.c. 100-120V | d.c. 220-250V | a.c. 100-120V | a.c. 220-250V | d.c. 100-120V | d.c. 220-250V |
| Nominal current (mA) | 0.7 | 0.65 | 0.7 | 0.65 | 1.8 | 1.6 | 1.95‡ | 1.6 |
| Striking voltage (min.) | 47-55 | 48-56 | 68-83 | 75-87 | 67-95 | 67-95 | 90-130 | 95-140 |
| Maintaining voltage* | 42-55 | 42-55 | 50-62 | 50-62 | 67-95 | 67-95 | 67-95‡ | 67-95 |
| Extinguishing voltage | 44-54 | 44-54 | 57-68 | 63-79 | 66-94 | 66-94 | 74-99 | 82-115 |
| Recommended series resistor 82 (kilohms) | 270 | 82 | 270 | 20 | 100 | 20 | 100 | 100 |
| Maximum power dissipated in resistor† (watts) | 0.07 | 0.18 | 0.07 | 0.20 | 0.15 | 0.36 | 0.15 | 0.40 |

* Indicates the actual voltage across the lamp required to maintain nominal current through the lamp.

† This occurs when a lamp giving maximum current is used with a resistor, the value of which is 20% below that recommended.

‡ The figures quoted are for the lamps that strike below 100V, therefore careful selection of lamps for use on low voltages d.c. is necessary.



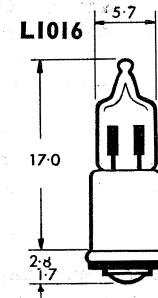
T-2 (S6s/8) Neon lamps, midget flange cap

Designed for use as miniature indicator lamps for a wide variety of electrical appliances and switchgear.

Both lamps require an externally connected resistor and the values recommended below are those consistent with good light output and a long life.

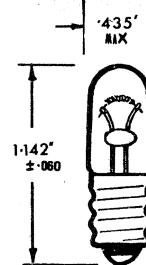
Where a brighter indication is required and a shorter lamp life is sufficient, the resistor value may be reduced by as much as one third. The resistor value is not critical and up to 300V, $\frac{1}{4}$ W resistors with a 20% tolerance are quite adequate.

| Part no. | Recommended Series Resistor a.c./d.c. 100-120V 200-250V | Striking voltage | | Maintaining voltage | | Current range nominal | |
|----------|---|------------------|------|---------------------|------|--------------------------|------------|
| | | Nom. | Max. | Nom. | Max. | | |
| L.1016 | 150k | 470k | 80 | 86 | 60 | 66 | 0.3-0.4 mA |



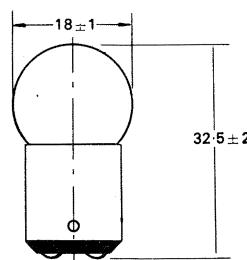
Dimensions in mm

T-3½ (E10) M.E.S. cap lamps



Dimensions in inches

18 mm S.B.C.

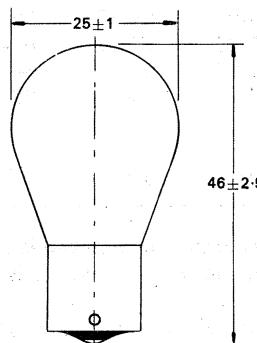


Dimensions in mm

| Part No. | U.S. Trade Ref. | Design Volts | Design Watts | Nominal M.S.C.P. | Nominal Lumens |
|----------|-----------------|--------------|--------------|------------------|----------------|
| L.1112 | — | 28 | 2.5 | .84 | 11.0 |

| Part No. | Design Volts | Design Watts | Nominal Lumens | Lamp Cap |
|----------|--------------|--------------|----------------|----------|
| L.1023 | 28 | 7 | 45 | B15d SBC |

25 mm S.C.C. (shape P)

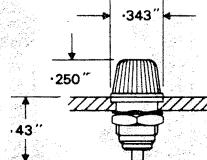
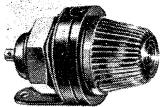


Dimensions in mm

| Part No. | Design Volts | Design Watts | Nominal Lumens | Lamp Cap |
|----------|--------------|--------------|----------------|-----------|
| L.1026 | 28 | 19 | 225 | BA15s SCC |



Sub-MINIATURE INDICATOR LIGHT



PART NUMBERS

Base (earthing): 02-1387

Cap: 02-1388/colour

Insulating kit: 02-1450

Max panel thickness
10 SWG

LAMPS

Use T-1 (S3s) Sub-Midget Flange cap
up to 1W—order separately

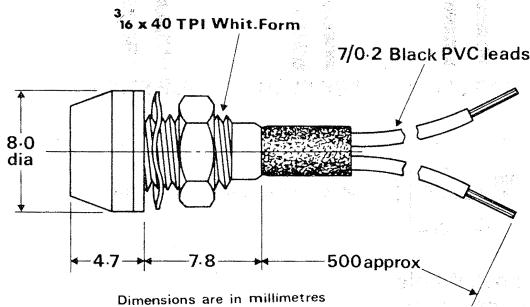
Designed to take full advantage of the extremely small T-1 lamp, this new indicator is suitable for countless applications in airborne electronic equipment, miniature lighting and all forms of signalling equipment.

The indicator light has a detachable lens and replaceable lamp. It has a metal body with an integral flange and a flat on one side to prevent rotation when mounted in a panel.

An insulating kit is available, comprising two insulating washers and an earth tag to convert the earthed base into an insulated type. The cap (or lens) is fluted for maximum brilliance and all-round visibility. Cap colours are: Red, Green, Yellow and Clear.

| Colour | Nomenclature |
|--------|------------------------------|
| Red | Signal Red BS 1376 class A |
| Green | Signal Green BS 1376 class A |
| Yellow | To DEF 5201 requirements |
| Clear | Colourless |

Sub-MINIATURE INDICATOR LIGHT



Robust and durable yet compact, this new indicator light is an obvious choice for use in computers, signalling equipment and similar spheres where low current consumption, long life without servicing and minimal space requirements are pre-eminent features.

It is a self-contained indicator with a brass, nickel plated body which houses a permanently encapsulated lamp and a non-detachable lens. The lamp is a 5 volt 60 mA T-1 wire ended type, crimped into position with a neoprene sleeve. The average lamp life of approximately 100,000 hours is based on accelerated laboratory life tests at over-voltage. Other lamps can be supplied to special order. Wire leads are 7/0.2mm PVC sheathed approx 50 cm long. Ambient temperature range is -55 to +70 C. Lens colours are Red, Green, Blue, Yellow and Clear.

PART NUMBERS

02-1623/1/colour

LAMPS

Non-replaceable T-1 wire ended.

A small, neat indicator light that was designed to provide industry with an inexpensive yet highly reliable component.

It has a detachable lens and replaceable lamp. The moulded plastic body has an integral flange with a small key for locating in the panel to prevent the indicator rotating. It is secured to the panel by a press-on spire nut (9/16" diameter). The two terminals are insulated from the panel and are designed for solder connection.

The lens cap is plastic, fluted for optimum brilliance with all round visibility and has a neat aluminium bezel.

Cap colours are: Red, Green, Yellow and Clear.



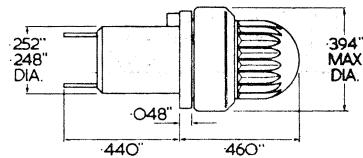
PART NUMBERS

Base: 80/10/2354/1

Cap: 02-1420/Colour

Spire Nut: 02-0036

Sub-MINIATURE INDICATOR LIGHT



LAMP

Use T-1 (S3s) Sub-Midget Flange cap
up to 1W—order separately

A robust and sealed indicator light with a detachable lens cap and replaceable lamp that has been designed to meet the requirements of DEF.5201.

The moulded body has an integral flange, an undercut with sealing ring and two flats to prevent rotation in the panel. When mounted correctly, a seal is formed at the panel face, capable of withstanding a pressure differential of one atmosphere.

The lens cap is plastic, fluted for optimum brilliance and all-round visibility.

Cap colours are Red, Green, Blue, Orange, Yellow and Clear.

The two terminals are insulated from the panel and are designed for soldering or will accept AMP series 78 taper terminals.



SEALED Sub-MINIATURE INDICATOR LIGHT



PART NUMBERS

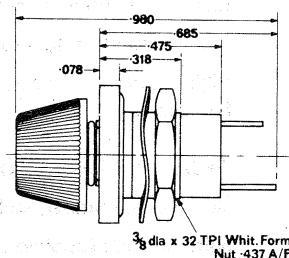
Base: 02-0495

Cap: 02-1464/Colour

LAMPS

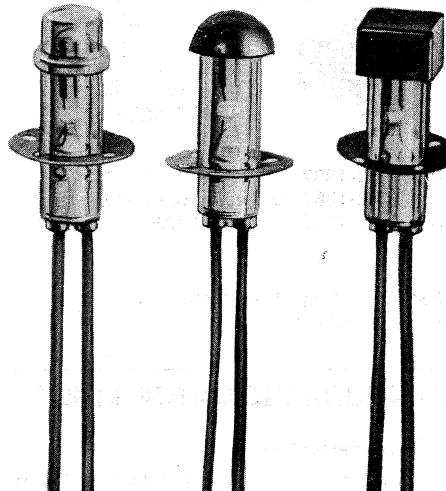
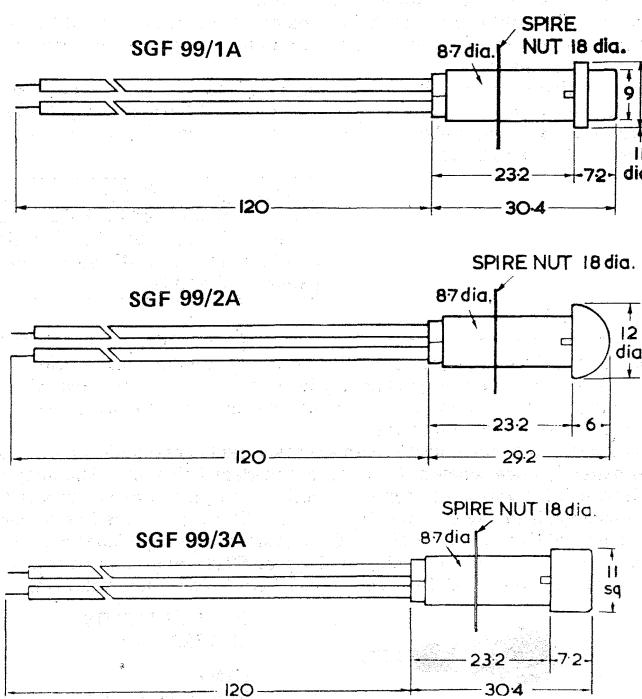
Use T-1 (S3s) Sub-Midget Flange cap
up to 1W—order separately

| Colour | Nomenclature |
|--------|-------------------------------|
| Red | Signal Red BS1376 Class A |
| Green | Signal Green BS1376 Class A |
| Blue | Signal Blue BS1376 Class A |
| Orange | Signal Yellow BS1376 Class B2 |
| Yellow | to DEF 5201 requirement |
| Clear | Colourless |

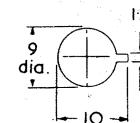




Signal lamps series SGF 99/1A, 99/2A, 99/3A



SGF 99/1A SGF 99/2A SGF 99/3A



all dimensions are in millimetres

Socket hole
dimensions.

NEON

| TYPE NUMBER | STYLES | VOLTAGE | RANGE | COLOURS |
|-------------|-------------|---------|-----------------|---------------------------|
| SGF 99 | 1A, 2A & 3A | 110V | 70 - 130V a.c. | { Red, Amber, |
| SGF 99 | 1A, 2A & 3A | 220V | 185 - 280V a.c. | Opal, Clear, |
| SGF 99 | 1A, 2A & 3A | 380V | 300 - 400V a.c. | (Green in 220 & 380 only) |

Striking voltage: 110V type approx 65V
220 & 380V type approx 187V

Life: 5,000 to 50,000 hours, according to length of operational periods.

INCANDESCENT

| TYPE NUMBER | STYLES | RATINGS | COLOURS |
|-------------|-------------|-----------|---------|
| SGF 99 | 1A, 2A & 3A | 6V 0.04A | |
| SGF 99 | 1A, 2A & 3A | 12V 0.05A | |
| SGF 99 | 1A, 2A & 3A | 24V 0.02A | |
| SGF 99 | 1A, 2A & 3A | 36V 0.02A | |
| SGF 99 | 1A, 2A & 3A | 48V 0.02A | |
| SGF 99 | 1A, 2A & 3A | 60V 0.02A | |

{ Red, Green,
Clear, Amber,
Opal or Blue

Life: 1,000 hours minimum.

Heat resistant up to 125°C, cables and resistor up to 95°C.

High temperature leads, clip-in bodies and other cap styles are available — consult R.E.L. Components Division for details.

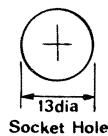
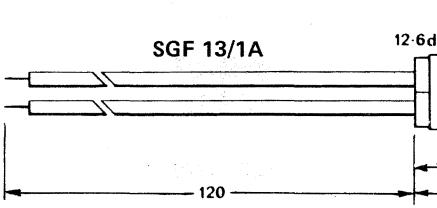
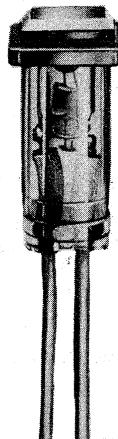
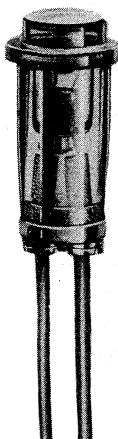
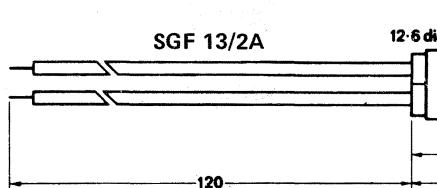
ORDERING PROCEDURE

Quote type number, style, voltage and colour required, e.g. SGF99/1A/24/Amber

Spire nuts are supplied with all items ordered.



Signal lamps series SGF 13/1A, 13/2A



all dimensions are in millimetres

NEON

| PART NUMBER | STYLES | VOLTAGE | RANGE | COLOURS |
|-------------|---------|---------|-----------------|---------------------------|
| SGF 13 | 1A & 2A | 110V | 70 - 130V a.c. | { Red, Amber, |
| SGF 13 | 1A & 2A | 220V | 185 - 280V a.c. | Opal, Clear, |
| SGF 13 | 1A & 2A | 380V | 300 - 400V a.c. | (Green in 220 & 380 only) |

Striking voltage: 110V type approx 65V

220 & 380V type approx 187V

Life: 5,000 to 50,000 hours, according to length of operational periods.

INCANDESCENT

| TYPE NUMBER | STYLES | RATINGS | COLOURS |
|-------------|---------|-----------|---------------|
| SGF 13 | 1A & 2A | 6V 0.15A | |
| SGF 13 | 1A & 2A | 12V 0.10A | |
| SGF 13 | 1A & 2A | 24V 0.05A | { Red, Green, |
| SGF 13 | 1A & 2A | 36V 0.02A | Clear, Amber, |
| SGF 13 | 1A & 2A | 48V 0.02A | Opal or Blue |
| SGF 13 | 1A & 2A | 60V 0.02A | |

Life: 1,000 hours minimum.

Heat resistant up to 125°C, cables and resistor up to 95°C.

High temperature leads, clip-in bodies and other cap styles are available — consult R.E.L. Components Division for details.

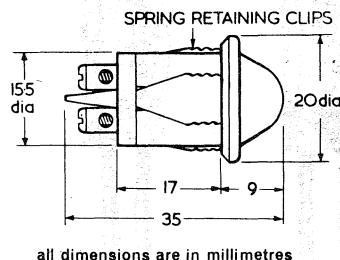
ORDERING PROCEDURE

Quote type number, style, voltage and colour required, e.g. SGF 13/1A/380/Opal.



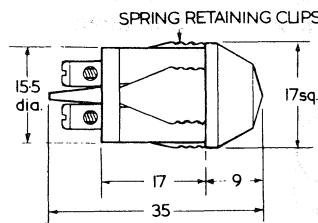
Signal lamps series SGF 20/1S, 20/2S

SGF 20/1S



SGF 20/1S

SGF 20/2S



Socket hole dimensions.



SGF 20/2S

NEON

| TYPE NUMBER | STYLES | VOLTAGE | RANGE | COLOURS |
|-------------|---------|---------|-----------------|---|
| SGF 20 | 1S & 2S | 110V | 70 - 130V a.c. | { Red, Amber, Opal, Clear, (Green in 220 & 380 only) |
| SGF 20 | 1S & 2S | 220V | 185 - 280V a.c. | |
| SGF 20 | 1S & 2S | 380V | 300 - 400V a.c. | |

Striking voltage: 110V type approx 65V
220 & 380V type approx 187V

Life: 5,000 to 50,000 hours, according to length of operational periods

INCANDESCENT

| TYPE NUMBER | STYLES | RATINGS | COLOURS |
|-------------|---------|-----------|--|
| SGF 20 | 1S & 2S | 6V 0.15A | { Red, Green, Clear, Amber, Opal or Blue |
| SGF 20 | 1S & 2S | 12V 0.10A | |
| SGF 20 | 1S & 2S | 24V 0.05A | |
| SGF 20 | 1S & 2S | 36V 0.02A | |
| SGF 20 | 1S & 2S | 48V 0.02A | |
| SGF 20 | 1S & 2S | 60V 0.02A | |

Life: 1000 hours minimum.

Heat resistant up to 125°C, resistor incorporated within the lampholder.
Other cap styles, wire leads or blade terminals are also available — consult R.E.L. Components Division for details.

ORDERING PROCEDURE

Quote type number, style, voltage and colour required, e.g. SGF 20/1S/36/Blue