



# 40 Series 0.250" (6.35mm) LED Panel Mount Indicator



**40 Series with built-in long life LED offer superior construction and longer life**  
**Flush or Raised LED indicator with fresnel lens, single, bi-color, or tri-color LED**  
**Voltage: 2VDC - 120VAC**

## Key features

- Mounting hole size: .250" (6.35mm)
- Prominent and flush lens options
- Voltage: 2-60 VDC or 120VAC
- Terminals: Cartridge, Bi-pin and wire leads (6" wire leads, 24 AWG)
- Available with a variety of LEDs including AlInGaP and InGaN technology for high brightness applications, single color, bi-color and with integrated resistors
- T-1 3/4 (5mm) LED
- Available in six LED single colors: red, amber, green, orange, blue and white with or without lens
- Available in one bi-color: red/green with or without lens
- Available in two tri-color: red/amber/green or green/amber/red with or without lens
- Seven lens colors available: red, amber, yellow, green, blue, water clear and smoke
- Offered with a variety of lens options: hi-hat, wide hi-hat, flush, wide flush or hi-dome, all featured with fresnel pattern lens which provides excellent light focus and assures maximum light output
- Low power consumption - uses up to 90% less energy than an incandescent indicator
- Mounts with spring retainer and washer (included)
- Offered with black bezel that enhances the LED contrast
- Suitable for high vibration applications
- LEDs operate significantly cooler than traditional lamps
- Compliant with RoHS and REACH



| 1 Model                        |  | Wires           |
|--------------------------------|--|-----------------|
| C <sup>[1]</sup><br>(optional) | 405 <sup>[2]</sup><br>41<br>44<br>46<br>461<br>464 | W<br>(optional) |

**TO ORDER, FOLLOW THE EXAMPLE:**

Select one **BOLD** component from each numbered category in the tables below.

| 1 Model | 2 LED       | 3 Voltage | 4 Lens Diffusion | 5 Lens Color | 6 Bezel Color |
|---------|-------------|-----------|------------------|--------------|---------------|
| 41      | <b>-BCG</b> | 5H        | -C               | G            | 0             |

→ Part Number **41-BCG5H-CG0**

| 2 STANDARD INTENSITY - DIFFUSED ENCAPSULATION |       |          |                         |               |                          |
|---|-------|----------|-------------------------|---------------|--------------------------|
| LED   | Color | λpk (nm) | Iv <sup>[3]</sup> (mcd) | Viewing Angle | V/C Table <sup>[5]</sup> |
| -BR <sup>[4]</sup>                            | RED   | 635      | 14                      | 60            | I                        |
| -BA <sup>[4]</sup>                            | AMB   | 583      | 16                      | 60            | I                        |
| -BG <sup>[4]</sup>                            | GRN   | 565      | 10                      | 60            | I                        |

| MEDIUM INTENSITY - TINTED ENCAPSULATION |       |          |                         |               |                          |
|---|-------|----------|-------------------------|---------------|--------------------------|
| LED                                     | Color | λpk (nm) | Iv <sup>[3]</sup> (mcd) | Viewing Angle | V/C Table <sup>[5]</sup> |
| -BCR                                    | RED   | 635      | 120                     | 35            | I                        |
| -BCA                                    | AMB   | 583      | 100                     | 35            | I                        |
| -BCG                                    | GRN   | 565      | 80                      | 24            | I                        |

| HIGH INTENSITY - WATERCLEAR ENCAPSULATION |       |          |                         |               |                          |
|---|-------|----------|-------------------------|---------------|--------------------------|
| LED                                       | Color | λpk (nm) | Iv <sup>[3]</sup> (mcd) | Viewing Angle | V/C Table <sup>[5]</sup> |
| -NWR                                      | RED   | 634      | 2800                    | 30            | I                        |
| -NWO                                      | ORG   | 605      | 2000                    | 30            | I                        |
| -NWA                                      | AMB   | 592      | 2800                    | 30            | I                        |
| -NWG                                      | GRN   | 520      | 2400                    | 45            | II                       |
| -NWB                                      | BLU   | 465      | 700                     | 45            | II                       |
| -NWW <sup>[8]</sup>                       | CWHT  |          | 2500                    | 50            | II                       |
| -NWL <sup>[8]</sup>                       | WWHT  |          | 1800                    | 50            | II                       |
| -NKR                                      | RED   | 634      | 3600                    | 15            | I                        |
| -NKO                                      | ORG   | 605      | 8000                    | 15            | I                        |
| -NKA                                      | AMB   | 592      | 3600                    | 15            | I                        |
| -NKG                                      | GRN   | 520      | 10000                   | 15            | II                       |
| -NKB                                      | BLU   | 465      | 3000                    | 15            | II                       |
| -NKW <sup>[8]</sup>                       | CWHT  |          | 9200                    | 20            | II                       |
| -NKL <sup>[8]</sup>                       | WWHT  |          | 9200                    | 15            | II                       |

| Voltage/Current    |            |
|--------------------|------------|
| Design Vf/If       | Max Vf/If  |
| <b>V/C Table I</b> |            |
| 5V/22mA            | 5.5V/28mA  |
| 12V/20mA           | 14V/25mA   |
| 15V/24mA           | 16.5V/28mA |
| 24V/17mA           | 26V/20mA   |
| 28V/16.5mA         | 30V/18mA   |
| 48V/15mA           | 50V/16mA   |
| 60V/9mA            | 65V/10mA   |
| 120VAC/3.5mA       | 130VAC/4mA |

| 3 Voltage <sup>[6]</sup> |
|--------------------------|
| 2                        |
| 5H                       |
| 12H                      |
| 15H                      |
| 24H                      |
| 28H                      |
| 48H                      |
| 60H                      |
| 120 <sup>[9]</sup>       |

| Voltage/Current     |            |
|---------------------|------------|
| Design Vf/If        | Max Vf/If  |
| <b>V/C Table II</b> |            |
| 5V/15mA             | 5.5V/23mA  |
| 12V/15mA            | 14V/20mA   |
| 15V/15mA            | 16.5V/18mA |
| 24V/15mA            | 26V/18mA   |
| 28V/15mA            | 30V/17mA   |
| 48V/9.5mA           | 50V/10mA   |
| 60V/7mA             | 65V/8mA    |
| 120VAC/3.5mA        | 130VAC/4mA |

| 4 Lens Diffusion |
|------------------|
| -C<br>Clear      |
| -N<br>Diffused   |

| 5 Lens Color |                          |
|--------------|--------------------------|
| R Red        | B Blue                   |
| A Amber      | W Water Clear            |
| Y Yellow     |                          |
| G Green      | -S Smoke <sup>[10]</sup> |

| SPECIALTY LEDs      |             |          |                         |               |                          |                           |
|---------------------|-------------|----------|-------------------------|---------------|--------------------------|---------------------------|
| LED                 | Color       | λpk (nm) | Iv <sup>[3]</sup> (mcd) | Viewing Angle | V/C Table <sup>[5]</sup> | Description               |
| -RLP <sup>[7]</sup> | RED         | 635      | 2.3                     | 50            | [5]                      | Low Power                 |
| -ALP <sup>[7]</sup> | AMB         | 583      | 2.1                     | 50            | [5]                      | Low Power                 |
| -GLP <sup>[7]</sup> | GRN         | 565      | 2.3                     | 50            | [5]                      | Low Power                 |
| -LRG <sup>[8]</sup> | RED/GRN     | 660/565  | 90/40                   | 60            | I                        | Bi-Color, Red Cathode     |
| -RAG <sup>[8]</sup> | RED/AMB/GRN | 630/565  | 6/6/6                   | 60            | I                        | Tri-Color, Common Cathode |
| -GAR <sup>[8]</sup> | GRN/AMB/RED | 635/565  | 5/5/5                   | 50            | I                        | Tri-Color, Common Anode   |

| 6 Bezel Color |
|---------------|
| 0<br>Black    |
| 9<br>White    |

[1] The C option specifies a pin length = .20" for panel lights mounted in the PS40 or PS44 socket (pg. 44). Mounting hardware is included with the socket. Do not select the W option.

[2] Model 405 has no lens. Omit the Lens Diffusion and Color (e.g. 405-BG5H-0).

[3] Iv = typical luminous intensity @ If = 20mA (Ta = 25°C). Iv is measured without lenses. For Low Power LEDs, If = 2mA.

[4] Use with Model 405 only.

[5] See Voltage/Current table for design specifications. Design current for low power LEDs = 2mA.

[6] Ta = 25°C. Voltage "2" indicates external resistor required. Voltages 5H through 60H are VDC. For AC operation, insert D after Voltage (e.g. 24HD), D indicates built-in rectifier; not required for 5H or 120VAC. DC operation not available for 120V. Bi-Color and Tri-Color not available in AC voltages.

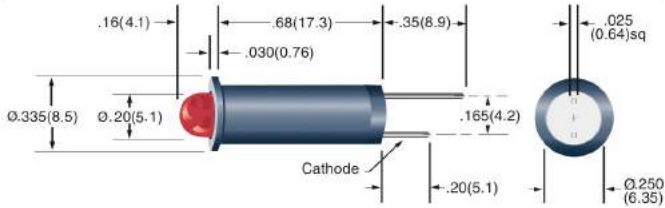
[7] Omit H when selecting a voltage (e.g. 41-RLP12-CW0).

[8] Select -CW or -NW lens only. -RAG Wire Leads: green anode/black cathode/red anode. -GAR Wire Leads: green cathode/black anode/red cathode. Common lead is the first lead clockwise from reference mark on header.

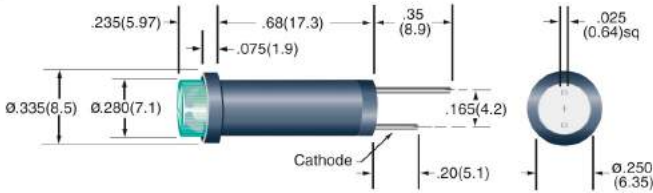
[9] Select high intensity LEDs only.

[10] Omit lens diffusion when selecting smoked lens. (e.g. 46-NWR-S0).

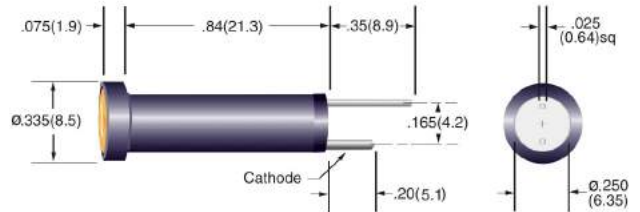
### 405 (no lens)



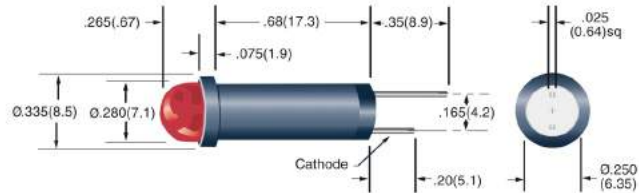
### 41 Hi-Hat Lens



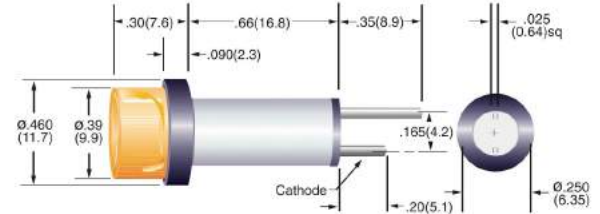
### 44 Flush Lens



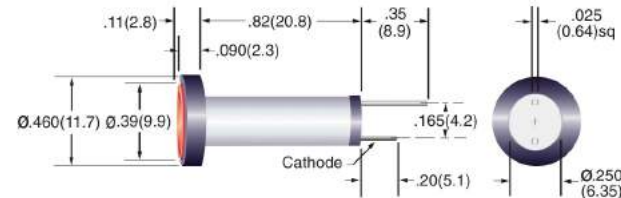
### 46 Hi-Dome Lens



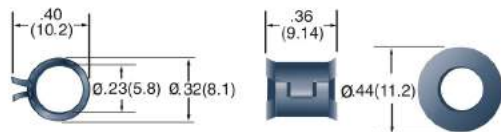
### 461 Wide Hi-Hat Lens



### 464 Wide Flush Lens



### TC4 & NW4, Mounting Hardware see note [1]



### Standard Wire Leads:

6.0" total length(nominal)/.50" stripped (nominal), red anode/black cathode, 24 AWG TPB UL1061 insulation. Contact factory for other lengths, gauges and colors.

### All dimensions are in inches (mm)

Tolerances: .xx"(.x) ±.025"(.63) / .xxx"(.xx)±.010"(.25)  
Specifications are subject to change without notice.

**TO ORDER, FOLLOW THE EXAMPLE:**

Select one **BOLD** component from each SHADED column in the tables below.

| <b>1</b> Model/<br>Part # | <b>2</b> # of<br>Pins |
|---------------------------|-----------------------|
| PS40                      | -2                    |

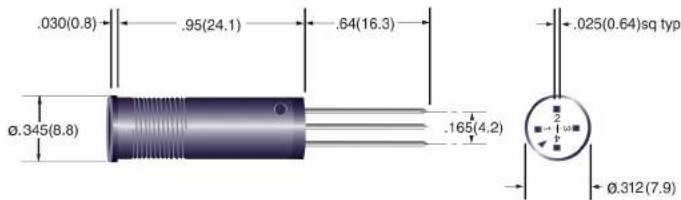
→Part Number **PS40-2**

| 40 SERIES SOCKETS & WIRING PLUGS |  |
|----------------------------------|--|
| <b>1</b> Model                   | Description                                      |
| PS40                             | Sockets for use with Models C405, C41, C46, C461 |
| PS44                             | Sockets for use with Models C44, C464            |
| SH40                             | Wiring Plug for use with 40 or C40 series        |
| CSH40                            | Wiring Plug for use with C40 series              |

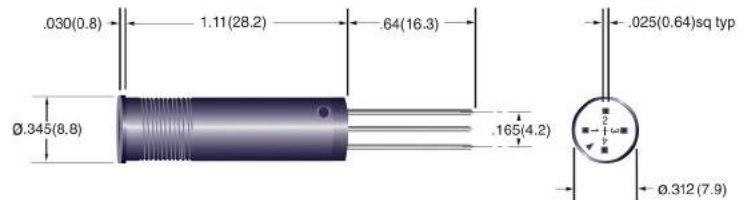
| <b>2</b> Number of Pins | Configuration     |
|-------------------------|-------------------|
| -2                      | <b>2, 4</b>       |
| -3                      | <b>1, 2, 4</b>    |
| -4                      | <b>1, 2, 3, 4</b> |

| 40 SERIES HARDWARE |                             |
|--------------------|-----------------------------|
| Part Number        | Description                 |
| CS24               | Gold Plated Crimp Terminals |
| CS24T              | Tin Plated Crimp Terminals  |
| TC4                | 40 Series Mounting Clip     |
| NW4                | 40 Series Mounting Washer   |

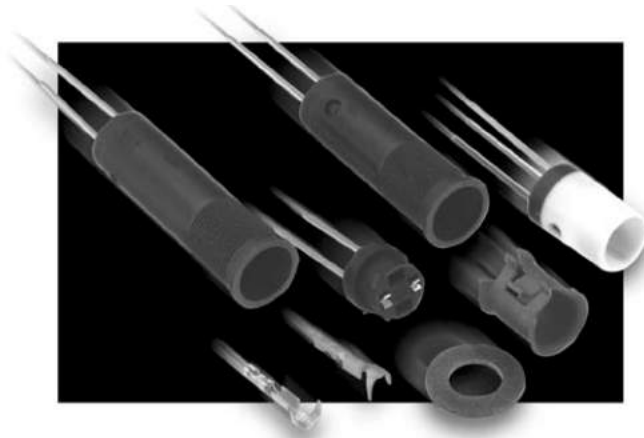
**PS40** TC5 & NW5 mounting hardware provided



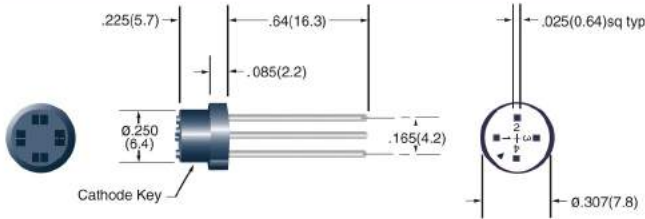
**PS44** TC5 & NW5 mounting hardware provided



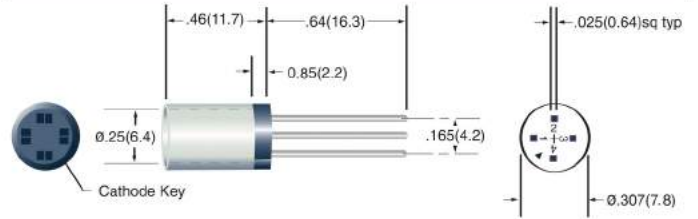




**SH40**



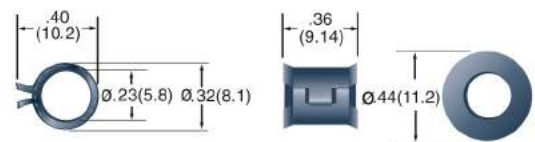
**CSH40**



**CS24 & CS24T 22AWG to 28AWG**



**TC4 & NW4, Mounting Hardware**



**All dimensions are in inches (mm)**  
 Tolerances: .xx"(.x) ±.025"(.63) / .xxx"(.xx)±.010"(.25)  
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