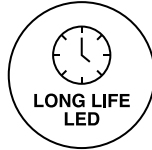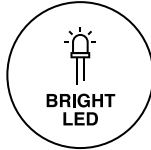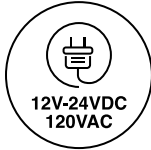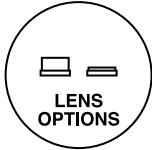# P8 Series
Ø .500″ (12.7mm)
LED Panel Mount Indicator

P8 Series offered in multiple colors and lens style, designed to enhance the LED contrast, available in tab terminals or wire leads.

LED COLOR OPTIONS | MOUNTING HOLE Ø 0.500 | LENS OPTIONS | 12V-24VDC 120VAC | BRIGHT LED | LONG LIFE LED | cULus

Key Features

- Mounting hole size: .500″ (12.7mm)
- Panel Thickness: 0.020″ (0.51mm) to 0.100″ (2.54 mm)
- Lens type options: hi-hat and flush all offered in four different lens colors with fresnel pattern lens that provides an excellent light focus and assures maximum light output
- Lens color options: red, amber, blue, and green
- Voltage options: 12-24VDC and 120VAC
- Terminals: tab terminals or wire leads (6″ wire leads, 24 AWG)
- Wire leads: 6.0″ total length (nominal) /.50″ stripped (nominal), red anode/black cathode, 18 AWG stranded UL1015 insulation
- LED single color options: red, amber, blue, and green
- "D" mounting hole prevents any rotation of the indicator when installed and connected during the assembly process
- Black housing offering which enhances the LED contrast
- Designed to enhance the LED contrast and features a front panel snap-in mounting that eases installation, and requires no additional hardware
- Available with a variety of LEDs and provides low energy consumption, fast on/off cycling, low heat generation, and long operating life
- Designed for quick installation in display panels and reduces overall cost due to less-frequent replacements
- Designed, manufactured and tested in accordance with the relevant UL standards
- For custom cable length, connectors or colors contact VCC
- Compliant with RoHS and REACH

Ordering Data

P81 (Hi-Hat Lens)

Example:
P81-R24HD-CR

P8 Series Hi-Hat Lens, Red LED,
Red Lens, 24V with Tab Terminals

Part Number	Color	λpk (nm)	lv (mcd)	Viewing Angle	Lens Color	Terminals	Voltage/Current	
							Design Vf/If	Max Vf/If
P81-R24HD-CR	Red	634	780	75	Red	Tab Terminals	24V/17mA	26V/20mA

Part Number	Color	λpk (nm)	lv (mcd)	Viewing Angle	Lens Color	Terminals	Voltage/Current	
							Design Vf/If	Max Vf/If
P81W-A12H-CA	Amber	592	600	75	Amber	Wire Leads	12V/20mA	14V/25mA
P81W-B12H-CB	Blue	465	168	75	Blue	Wire Leads	12V/15mA	14V/20mA
P81W-G12H-CG	Green	520	780	75	Green	Wire Leads	12V/15mA	14V/20mA
P81W-R12H-CR	Red	634	780	75	Red	Wire Leads	12V/20mA	14V/25mA

P81W (Hi-Hat Lens)

Example:
P81W-A12H-CA

P8 Series Hi-Hat Lens, Amber LED,
Amber Lens, 12V with Wire Leads

P84 (Flush Lens)

Example:
P84-A120-CA

P8 Series Flush Lens, Amber LED,
Amber Lens, 120V with Tab Terminals

Part Number	Color	λpk (nm)	lv (mcd)	Viewing Angle	Lens Color	Terminals	Voltage/Current	
							Design Vf/If	Max Vf/If
P84-A120-CA	Amber	592	600	75	Amber	Tab Terminals	120VAC/3.5mA	130VAC/4mA
P84-B120-CB	Blue	465	168	75	Blue	Tab Terminals	120VAC/3.5mA	130VAC/4mA
P84-G120-CG	Green	520	780	75	Green	Tab Terminals	120VAC/3.5mA	130VAC/4mA

Part Number	Color	λpk (nm)	lv (mcd)	Viewing Angle	Lens Color	Terminals	Voltage/Current	
							Design Vf/If	Max Vf/If
P84W-A12H-CA-R-	Amber	592	600	75	Amber	Wire Leads	12V/20mA	14V/25mA
P84W-G12H-CG-R-	Green	520	780	75	Green	Wire Leads	12V/15mA	14V/20mA
P84W-R12H-CR-R-	Red	634	780	75	Red	Wire Leads	12V/20mA	14V/25mA
P84W-R120-CR	Red	634	780	75	Red	Wire Leads	120VAC/3.5mA	130VAC/4mA

P84W (Flush Lens)

Example:
P84W-G12H-CG-R-

P8 Series Flush Lens, Green LED,
Green Lens, 12V with Wire Leads

Product Dimensions

P81 (Hi-Hat Lens)

∅ .50 [12.7]
∅ .61 [15.5]
.30 [7.6]
1.41 [35.8]
.35 [8.9]
ANODE MARKING

P81W (Hi-Hat Lens)

∅ .61 [15.4]
∅ .50 [12.6]
.10 [2.5]
1.40 [35.5]
MARK Ö+Ó
BLACK (-)
RED (+)
6.00 [152.4]min.
18 AWG STRANDED, UL1015 INSULATION
.50 [12.7]nom.

P84 (Flush Lens)

∅ .50 [12.6]
∅ .61 [15.4]
.13 [3.3]
1.24 [31.4]
ANODE MARKING

P84W (Flush Lens)

∅ .61 [15.4]
∅ .50 [12.6]
.10 [2.5]
1.23 [31.1]
MARK Ö+Ó
BLACK (-)
RED (+)
6.00 [152.4]min.
18 AWG STRANDED, UL1015 INSULATION
.50 [12.7]nom.
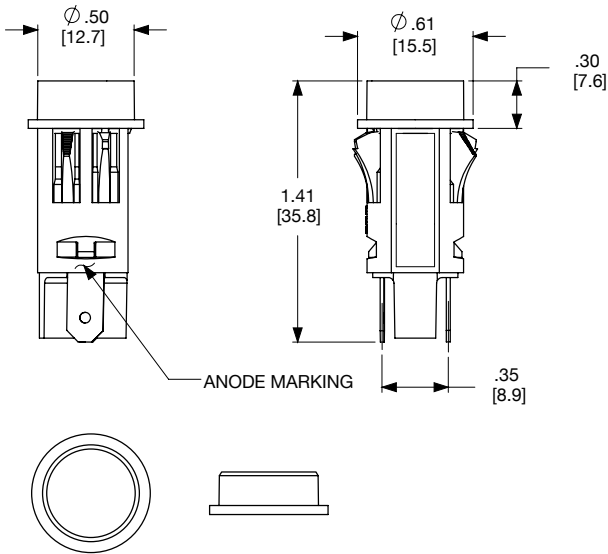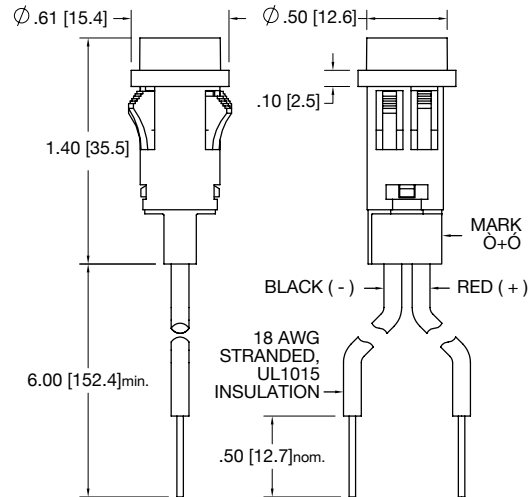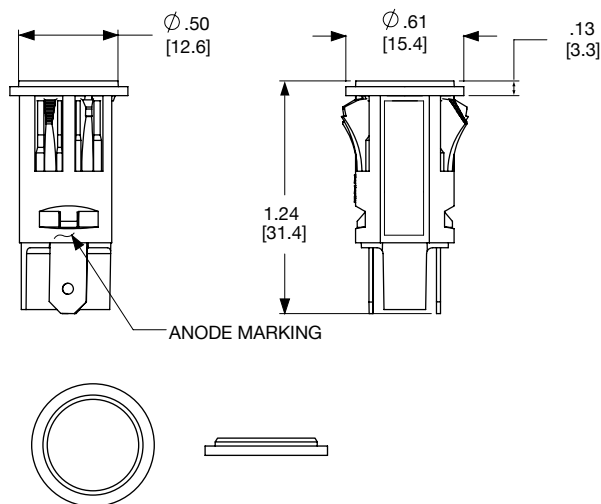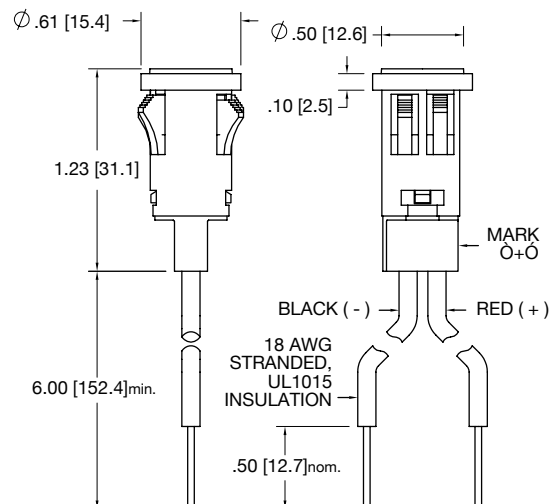
Recommended Mounting Hole

0.500/0.505 [12.70/12.83]

Standard Mounting Hole

.470/ .475

.500/ .505

D-Mounting Hole

Notes:

1. All dimensions are in inches [millimeters]
2. Tolerance is ± 0.25″ unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Materials

Housing	Black Nylon UL94 V-2
Lens	Clear Polycarbonate Fresnel Lexan
Bezel	Pattern Black Nylon
Tab (P81 and P84)	Quick-connect tinned brass
Wire (P81W & P84W)	18AWG Red anode/Black cathode Stranded UL1015 insulation

Installation Specifications

Mounting Hole	0.500″ to 0.505″ (12.70 to 12.83 mm)
D-Mounting Hole	0.470″ to 0.475″ (11.94 to 12.07 mm)
Panel Thickness	0.020″ to 0.100″ (0.51 to 2.54 mm)
Tab Terminals	0.187” (4.75mm) terminals
Wire Leads	18AWG 6″ length/0.5″ stripped

Temperature Specifications

Operating Temperature	-30°C to +60°C -22°F to +185°F
Storage Temperature	-40°C to +100°C -40°F to +212°F

Parameter	LED color							Unit
	Red	Orange	Amber	Green	Blue	White	Warm-white	
TYP. Luminous intensity @ I_f=20mA	780	360	600	780	168	700	600	mcd
Reverse breakdown @ I_r=100uA @ I_r=50uA	5	5	5	5	5	5	5	V
Peak wavelength	629	611	592	520	465	-	-	nm
Dominant wavelength	623	605	590	525	470	-	-	nm
TYP. Color temperature	-	-	-	-	-	6500	3000	K

Compliances and Approvals

REACH COMPLIANCE

RoHS COMPLIANT

c(UL)us

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[VCC](#):
 [P84W-R120-CR](#) [P84-A120-CA](#) [P84-G120-CG](#) [P81W-G12H-CG](#) [P81W-R12H-CR](#) [P81W-A12H-CA](#)