

QS SERIES Snap-in Panel Mount LED Indicators

Distinctive features and specifications

VOYC1507US

Features

- 6mm, 8mm, 10mm and 12mm Ø cut-out sizes
- Front panel snap-in mounting requires no additional hardware
- Colored diffused flat lenses
- Red, Green, Yellow, Blue, Orange, White (clear)
- 2VDC – 220VAC
- 6mm solder lug (2.0x0.5mm) or 200mm wire terminations
- 8mm, 10mm, 12mm solder lug/Faston (2.8x0.8mm) or 200mm wire terminations
- Standard intensity diffused LED or high brightness LED for daylight viewing
- Bi-color and Tri-Color option

NB: UL Recognized Component



TECHNICAL SPECIFICATIONS

| Voltage | Operating Voltage (Min to Max) | Operating Current (Typical All Types) |
|--------------------|-----------------------------------|--|
| 2VDC (No Resistor) | 1.8 to 2.5VDC | 20mA* |
| 6VDC | 5.4 to 6.6VDC | 20mA |
| 12VDC | 10.8 to 13.2VDC | 20mA |
| 24VDC | 21.6 to 26.4VDC | 20mA |
| 28VDC | 25.2 to 30.8VDC | 20mA |
| 110VAC | 99 to 110VAC | 6mA |
| 220VAC | 207 to 253VAC | 3mA |

| |
|--|
| Max Reverse Voltage: 5V |
| Viewing Angle: 30–100° (dependant on model) |
| Life Expectancy: 100,000 hours |
| Operating Temperature Range: –40 to +85°C |

| Standard LED | Intensity (all voltages) | Forward Voltage |
|---|-----------------------------|-----------------|
| HE Red | 80mcd | 2.0V |
| Green | 40mcd | 2.2V |
| Yellow | 30mcd | 2.1V |
| Blue | 800mcd | 3.3V |
| White(clear) | 800mcd | 3.3V |
| Orange | 60mcd | 2.0V |
| Bi-color (Typical) (Red/Green) | 20/15mcd | 2.0V/2.2V |
| Tri-color (Typical) (Red/Green/Yellow) | 60/50mcd | 2.5V |
| Bi-color - The color is changed by reversing the polarity of the supply voltage. | | |
| Tri-color - The indicator has red and green LEDs, when both connected yellow is produced. | | |
| High Brightness | Intensity (all voltages) | Forward Voltage |
| HE Red | 6,000mcd | 2.2V |
| Green | 4,000mcd | 3.3V |
| Yellow | 1,380mcd | 2.0V |
| Orange | 4,000mcd | 2.2V |
| Luminous intensity will be reduced with lower operating current. | | |

Note: The operating voltage must not be exceeded by more than 10% as this will result in reduced life expectancy.

The company reserves the right to change specifications without notice.

* Customer to supply resistor for desired operating current.

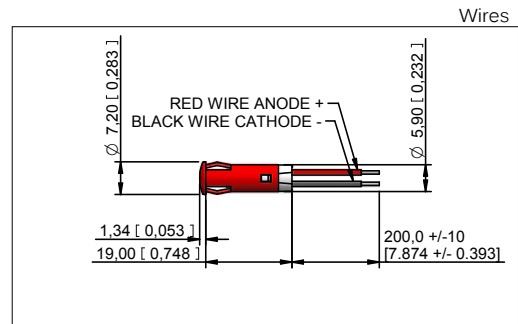
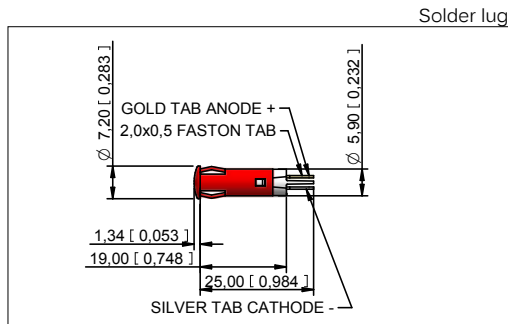
Luminous intensity is measured at 20mA on a discrete LED unless otherwise stated.

Luminous intensities and color shades of white LEDs may vary within a batch.

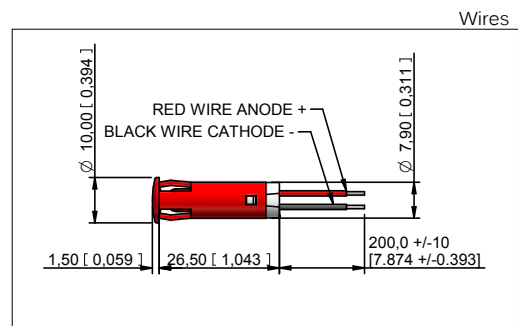
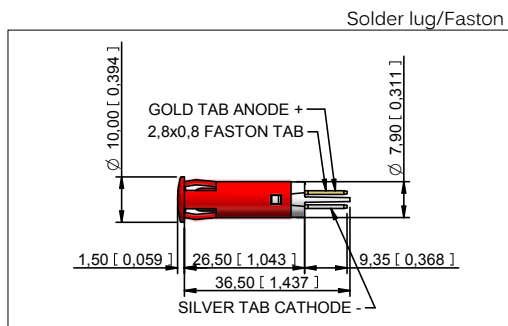
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Technical Drawings

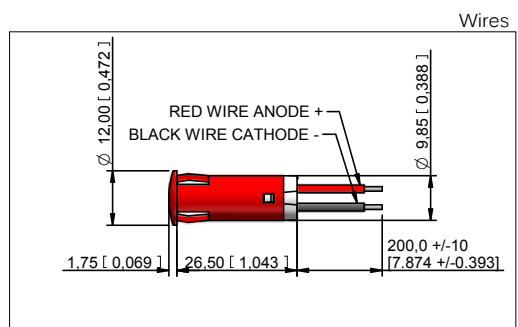
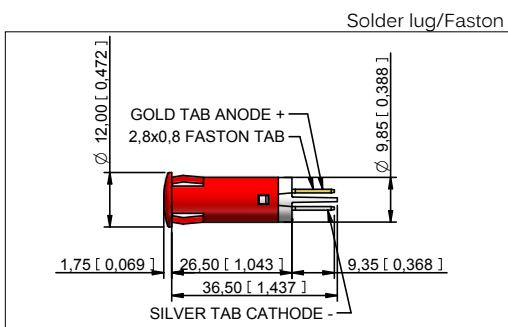
Ø6mm



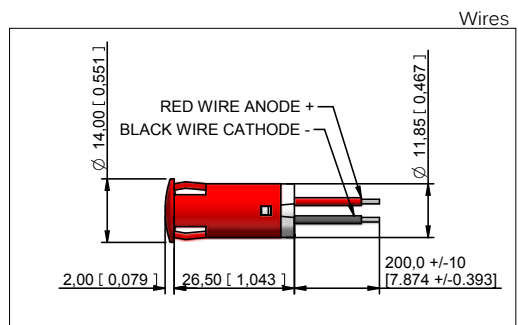
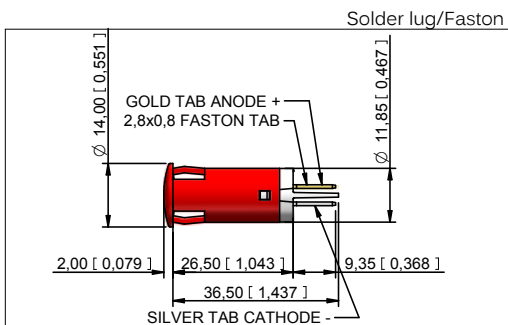
Ø8mm



Ø10mm



Ø12mm



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Order Overview

STANDARD OPTIONS

The QS Series is available with a range of standard options, to specify your LED, simply choose one option from each column. An example is shown below.

| | | | | | |
|---------------|--|--|--|---|--|
| QS | 8 | 3 | XX | R | 220 |
| SERIES | MOUNTING HOLE | TERMINALS | TYPE OF ILLUMINATION | LED COLOR | VOLTAGE |
| QS | 6 = Ø6mm 8 = Ø8mm 10 = Ø10mm 12 = Ø12mm | 1 = Solder lug/ faston 3 = Wires | XX = Fixed light YY = Bi-color ZZ = Tri-color KK = Flashing light (only up to 28VDC) | R = Red G = Green Y = Yellow B = Blue W = White (clear) O = Orange HR = Hyper Bright Red HG = Hyper Bright Green HY = Hyper Bright Yellow HO = Hyper Bright Orange RG = Red/Green RYG = Red/Yellow/Green | 02 = 2VDC 06 = 6VDC 12 = 12VDC 24 = 24VDC 28 = 28VDC 110 = 110VAC 220 = 220VAC |

Example QS83XXR220
Ø8mm mounting hole with wire terminations
fixed light, Red 220VAC



- Gold solder lug/Faston terminal denotes Anode (+), silver terminal denotes Cathode (-)
- Standard wire length is 200mm, 22AWG, red wire denotes Anode (+), black wire denotes Cathode (-) for other wire lengths consult APEM
- For LEDs with alternate voltages consult APEM
- Bi-color LEDs, by connecting the gold Faston (+) one color is produced, by reversing the supply voltage another color is produced – Bi-colors are available up to 28VDC
- Take care when soldering to the Faston terminals (recommended solder temperature 270°C - 2 sec)
- The Tri-color LED has red and green LEDs when both are connected yellow is produced
- Maximum panel thickness 11mm
- We recommend using high brightness LEDs for use at 220VAC
- For resistorless versions (02) please pay attention to the forward voltage
- For multi-voltage options please consult APEM