

Q6 series

Ø6 mm panel mount LED indicators



DISTINCTIVE FEATURES

3 mm colored diffused epoxy lens or 3 mm water clear super bright LEDs

Prominent, recessed and flush bezel styles

(2.0 x 0.5) solder lug terminals, pins or (200 mm long) wire terminations, other lengths available on request



ENVIRONMENTAL SPECIFICATIONS

- IP67 sealing option (EN60529)
- Operating & Storage Temperature Range:
Rear plastic body: -30 °C to +65 °C (-22 °F to +149 °F)
Rear epoxy body: -40 °C to +85 °C (-40 °F to +185 °F)



GENERAL SPECIFICATIONS

- Max Reverse Voltage: 5 V
- Viewing Angle: 30–100° (dependant on model)
- Life Expectancy: 100,000 hours
- Torque: 4 cNm
- Maximum panel thickness 7 mm
- Insulation resistance : 4,000 MΩ at 500 VDC

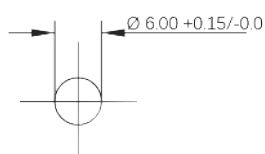
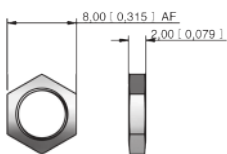


MATERIALS

- Plated brass bezel finished in bright chrome, black or satin grey and moulded polycarbonate rear body



MOUNTING



The company reserves the right to change specifications without notice.

All LED characteristics are dependent upon environmental conditions. Therefore published data should be considered nominal and subject to variations.



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ELECTRICAL SPECIFICATIONS

STANDARD LED INTENSITY

| LED COMPONENT SPECIFICATIONS | | | |
|--------------------------------|------------------------|----------|-----------------|
| | Prominent and Recessed | Flush | Forward Voltage |
| HE Red | 40 mcd | 10 mcd | 2.0 V |
| Green | 50 mcd | 45 mcd | 2.1 V |
| Yellow | 30 mcd | 100 mcd | 2.1 V |
| Blue | 1,200 mcd | 100 mcd | 3.8 V |
| White | 1,200 mcd | 160 mcd | 3.8 V |
| Orange | 60 mcd | 10 mcd | 2.0 V |
| Bi-color (Typical) (Red/Green) | 20/15 mcd | 10/8 mcd | 2.0 V/2.2V |

Bi-color - The color is changed by reversing the polarity of the supply voltage.

SUPER BRIGHT LED INTENSITY

| LED COMPONENT SPECIFICATIONS | | | |
|------------------------------|------------------------|-----------|-----------------|
| | Prominent and Recessed | Flush | Forward Voltage |
| HE Red | 1,000 mcd | 700 mcd | 2.2 V |
| Green | 1,200 mcd | 2,000 mcd | 3.5 V |
| Yellow | 2,000 mcd | 4,200 mcd | 2.3 V |
| Blue | 1,600mcd | 200 mcd | 3.3 V |
| White | 1,200 mcd | 1560 mcd | 3.3 V |
| Orange | 10,000 mcd | 500 mcd | 2.2 V |

HYPER BRIGHT LED INTENSITY

| LED COMPONENT SPECIFICATIONS | | | |
|------------------------------|------------------------|----------|-----------------|
| | Prominent and Recessed | Flush | Forward Voltage |
| HE Red | 5,800 mcd | 600 mcd | 2.1 V |
| Green | 2,000 mcd | 350 mcd | 3.2 V |
| Yellow | 1,200 mcd | 2180 mcd | 2.1 V |
| Orange | 4,500 mcd | 400 mcd | 2.2 V |

- The operating voltage must not be exceeded by more than 10% as this will result in reduced life expectancy
- Luminous intensity is measured at 20 mA on a discrete led unless otherwise stated.
- Luminous intensities and color shades of white LEDs may vary within a batch.
- Luminous intensity will be reduced with lower operating current.

| Voltage | Operating Voltage | Operating Current |
|------------------|-------------------|---------------------|
| | (Min to Max) | (Typical All Types) |
| 02 (No Resistor) | 1.8 to 3.3 VDC | 20 mA max* |
| 6 VDC | 5.4 to 6.6 VDC | 20 mA |
| 12 VDC | 10.8 to 13.2 VDC | 20 mA |
| 24 VDC | 21.6 to 26.4 VDC | 20 mA |
| 28 VDC | 25.2 to 30.8 VDC | 20 mA |

* Customer to supply resistor for desired operating current.

ADDITIONAL INFORMATION ON LED COMPONENTS

- Recommended usage:
 - Standard: Homogenous light output that is good for indoor applications.
 - Hyper Bright: Homogenous light output that is good for outside viewing and is daylight visible.
 - Super Bright: A water clear LED that is good for long distance viewing and is daylight visible.



BUILD YOUR PART NUMBER

| | | | | | |
|---|---|---|--|---|--|
| <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">Q</div> <p>SERIES</p> | <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">6</div> <p>MOUNTING HOLE Ø6 mm</p> | <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">P</div> <p>BEZEL STYLE</p> <ul style="list-style-type: none"> P Prominent R Recessed F Flush | <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">1</div> <p>TERMINALS</p> <ul style="list-style-type: none"> 1 Solder Lug/ Fastons (2.0 x 0.5) 2 Pins 3 Wires | <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">4</div> <p>BEZEL FINISH</p> <ul style="list-style-type: none"> 4 Rear epoxy Pins 5 Rear epoxy Wires 6 Short body Pins 7 Short body Wires | <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">C</div> <ul style="list-style-type: none"> C Bright Chrome B Black G Satin Grey |
| <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">XX</div> <p>TYPE OF ILLUMINATION</p> <ul style="list-style-type: none"> XX Fixed Light KK Flashing Light (12 V – 28 VDC) YY Bi-color | <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">R</div> <p>LED COLOR</p> <ul style="list-style-type: none"> R Red G Green Y Yellow B Blue W White O Orange HR Hyper Bright Red HG Hyper Bright Green HY Hyper Bright Yellow HO Hyper Bright Orange | <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">SR</div> <p>VOLTAGE</p> <ul style="list-style-type: none"> SR Super Bright Red SG Super Bright Green SY Super Bright Yellow SB Super Bright Blue SW Super Bright White SO Super Bright Orange RG Red/Green RY Red/Yellow GY Green/Yellow | <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">02</div> <p>SEALING</p> <ul style="list-style-type: none"> 02 no resistor* 06 6V DC 12 12 VDC 12A 12 VAC/DC 24 24 VDC 24A 24 VAC/DC 28 28 VDC 28A 28 VAC/DC <p>* please refer to the forward voltage in electrical specifications</p> | <div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">(Blank)</div> <ul style="list-style-type: none"> (Blank) Unsealed E IP67 | |



ABOUT THIS SERIES

- Notice:** please note that not all combinations of above numbers are available.
- Gold faston terminal denotes anode (+), silver terminal denotes cathode (-)
 - Standard and Bi-Colour are provided in Standard wire length is 200mm, 24AWG UL1061, Red wire denotes anode (+), Black wire denotes cathode (-) for other lengths consult APEM.
 - For LEDs with alternative voltages consult APEM
 - Bi-color leds, by connecting the gold solder lug (+) one color is produced, by reversing the supply voltage another color is produced – bi-colors are available up to 28 V in DC only.
 - Take care when soldering to the faston terminals (recommended solder temperature 300 °C - 3 sec)
 - Body options 2, 4 and 6 are only available without integral resistor (02).
 - Short body wires are only available up to 28 VDC.

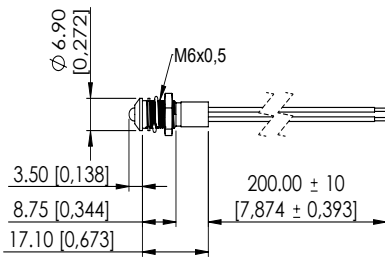
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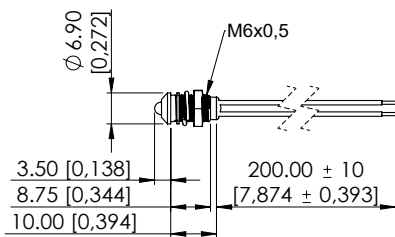
PROMINENT BEZEL



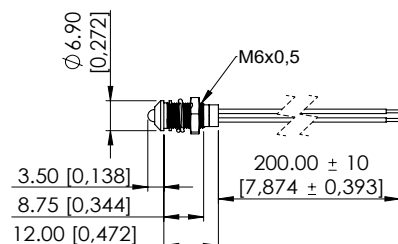
WIRES



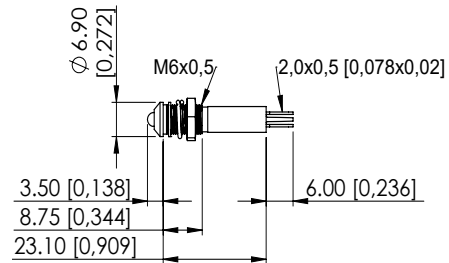
REAR EPOXY WIRES



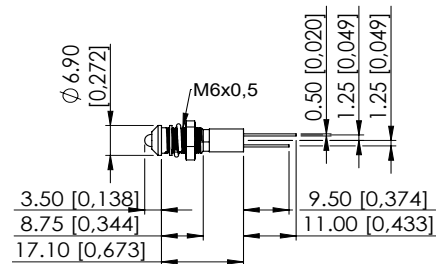
SHORT BODY WIRES



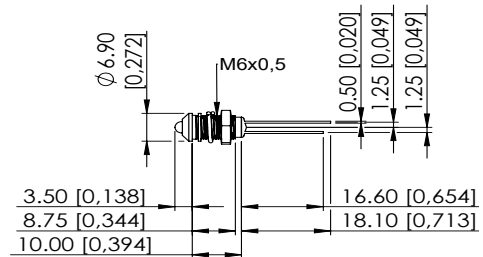
SOLDER LUG/FASTON



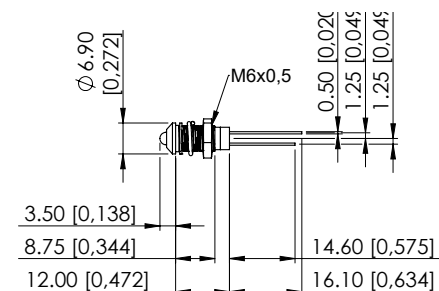
PINS



REAR EPOXY PINS



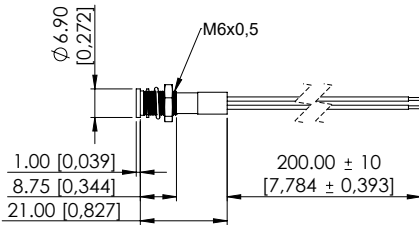
SHORT BODY PINS



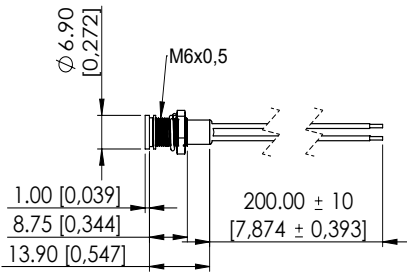
FLUSH BEZEL



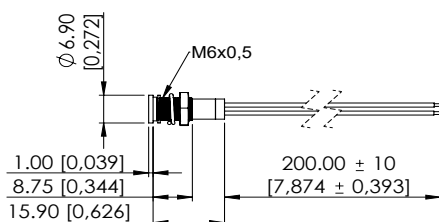
WIRES



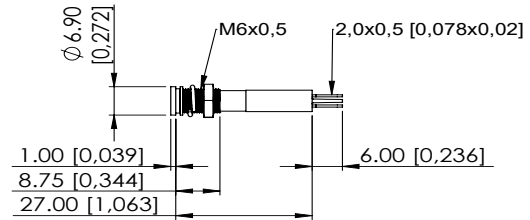
REAR EPOXY WIRES



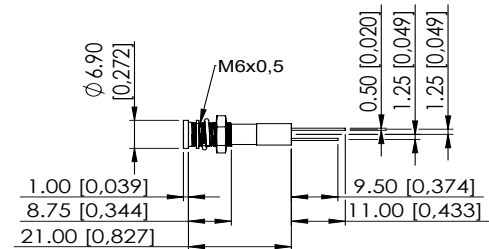
SHORT BODY WIRES



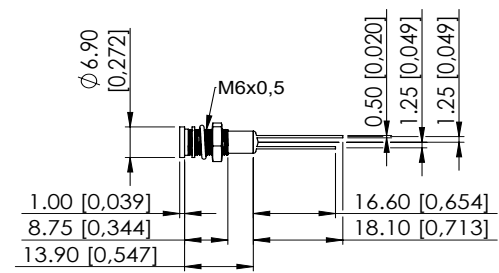
SOLDER LUG/FASTON



PINS



REAR EPOXY PINS



SHORT BODY PINS

