

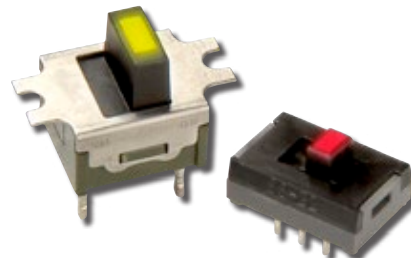
# Change Notice

# MS & SS Series

## Changes to LEDs for MS & SS Illuminated Slides

Type of Change:


- Engineering     Part Number
- Product         Appearance



**MS and SS Illuminated Slides will have LED Revisions.**

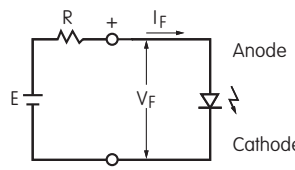
The red, yellow and green LEDs for MS and SS Series illuminated slide switches will be changing. The revision will effect the electrical specifications for the yellow and green LEDs, as shown on the following table.

Standard and custom MS and SS illuminated switches are included in the change, and part numbers for effected standard models are shown on page 2.

| CHANGES TO LED SPECIFICATIONS FOR MS & SS ILLUMINATED SERIES  |                 |                    |                   |                 |                    |                   |  |
|---|-----------------|--------------------|-------------------|-----------------|--------------------|-------------------|--|
| <br>The electrical specifications shown are determined at a basic temperature of 25°C. The LED is an integral part of the switch and not available separately. | Before Change   |                    |                   | After Change    |                    |                   |  |
|   | <b>C</b><br>Red | <b>E</b><br>Yellow | <b>F</b><br>Green | <b>C</b><br>Red | <b>E</b><br>Yellow | <b>F</b><br>Green |  |
| Maximum Forward Current $I_{FM}$  | 30mA            | 30mA               | 25mA              | 30mA            | 30mA               | <b>30mA</b>       |  |
| Typical Forward Current $I_F$   | 16mA            | 16mA               | 16mA              | 16mA            | 16mA               | 16mA              |  |
| Forward Voltage $V_F$   | 1.98V           | 2.06V              | 2.16V             | 1.98V           | <b>2.05V</b>       | <b>1.95V</b>      |  |
|   | $I_F = 16mA$    | $I_F = 16mA$       | $I_F = 16mA$      | $I_F = 16mA$    | $I_F = 16mA$       | $I_F = 16mA$      |  |
| Maximum Reverse Voltage $V_{RM}$  | 5V              | 5V                 | 5V                | 5V              | 5V                 | 5V                |  |
| Current Reduction Rate Above 25°C $\Delta I_F$  | 0.40mA/°C       | 0.42mA/°C          | 0.33mA/°C         | 0.40mA/°C       | <b>0.40mA/°C</b>   | <b>0.40mA/°C</b>  |  |
| Ambient Temperature Range   | -15° ~ +60°C    |                    |                   | -15° ~ +60°C    |                    |                   |  |

**Notes**

- The LED circuit is isolated and requires an external power source.
- For best results and safe use of the LEDs, the supply voltage should be more than the LED forward voltage. In addition, an appropriately valued ballast resistor should be used. Without the ballast resistor, the LED will be damaged or destroyed. The resistor value can be calculated by using the formula shown here.
- There are no changes to the switches' external dimensions.
- Contact information is below if more details are needed.



$$R = \frac{E - V_F}{I_F}$$

Where: R = Resistor Value (Ohms)  
 E = Source Voltage (V)  
 V<sub>F</sub> = Forward Voltage (V)  
 I<sub>F</sub> = Forward Current (A)

**Effective Date**

Changes to LED specifications for MS and SS Series illuminated slides will be effective June 2022.



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## Changes to LEDs for MS & SS Illuminated Slides

| Effected Standard Part Numbers for MS Illuminated Slides |            |            |            |
|--|------------|------------|------------|
| MS12LNW03C   | MS12LFW01C | MS13LNW03C | MS13LFW01C |
| MS12LNW03E   | MS12LFW01E | MS13LNW03E | MS13LFW01E |
| MS12LNW03F   | MS12LFW01F | MS13LNW03F | MS13LFW01F |

| Effected Standard Part Numbers for SS Illuminated Slides |            |            |            |
|--|------------|------------|------------|
| SS12SDP2LC   | SS12SDH2LC | SS22SDP2LC | SS22SDH2LC |
| SS12SDP2LE   | SS12SDH2LE | SS22SDP2LE | SS22SDH2LE |
| SS12SDP2LF   | SS12SDH2LF | SS22SDP2LF | SS22SDH2LF |



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