### **Change Notice**

Changes for Bright Red LEDs in UB & UB2 Series Pushbuttons & Indicators

Type of Change:

✓ Engineering✓ Part Number✓ Product✓ Appearance

The Bright Red LEDs for UB and UB2 Series illuminated pushbuttons and indicators will be changing. Both standard and custom pushbuttons and indicators are included in the revision. The change will effect electrical specifications, which are compared below with the new specifications. Part numbers for effected standard switches and indicators are shown on the following page.

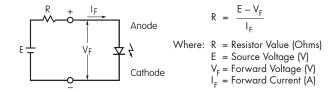


UB & UB2 Series with Bright Red LEDs will Undergo Changes

CHANGES TO SPECIFICATIONS FOR BRIGHT RED LED					
The electrical specifications shown are determined at a basic temperature of 25°C. Polarity marks are on bottom of switch. The LED is an integral part of the switch and not available separately.	(+)0 (-)	Before Change 5C	After Change 5C		
Maximum Forward Current	I <sub>FM</sub>	30mA	30mA		
Typical Forward Current	I <sub>F</sub>	20mA	20mA		
Forward Voltage	$V_{F}$	1.85V (I <sub>F</sub> = 20mA)	1.95V (I <sub>F</sub> = 20mA)		
Maximum Reverse Voltage	$V_{RM}$	5V	5V		
Current Reduction Rate Above 25°C	$\Delta I_{F}$	0.40mA/°C	0.40mA/°C		
Ambient Temperature Range		−25°C ~ +50°C	−25°C ~ +50°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.

#### **Effective Date**

Changes for UB and UB2 Series Illuminated Pushbuttons and Indicators with Bright Red LEDs will be effective October 2023.



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## **Change Notice**

# Changes for Bright Red LEDs in UB & UB2 Series Pushbuttons & Indicators

EFFECTED STANDARD PART NUMBERS FOR UB SWITCHES			FOR UB INDICATORS
UB15KKW015C	UB25KKG015C	UB15RKW035C	UB01KW035C
UB16KKW015C	UB26KKG015C	UB16RKW035C	UB03KW035C
UB25KKW015C	UB15NKG015C	UB25RKW035C	UB04KW035C
UB26KKW015C	UB16NKG015C	UB26RKW035C	UB06KW035C
UB15NKW015C	UB25NKG015C	UB15SKG035C	UB06BKW035C
UB16NKW015C	UB26NKG015C	UB16SKG035C	
UB25NKW015C	UB15NBKG015C	UB25SKG035C	
UB26NKW015C	UB16NBKG015C	UB26SKG035C	<del></del>
UB15NBKW015C	UB25NBKG015C	UB15RKG035C	
UB16NBKW015C	UB26NBKG015C	UB16RKG035C	
UB25NBKW015C	UB15SKW035C	UB25RKG035C	
UB26NBKW015C	UB16SKW035C	UB26RKG035C	
UB15KKG015C	UB25SKW035C		
UB16KKG015C	UB26SKW035C		

Effected part numbers include standard part numbers combined with any cap type or color. Effected part numbers also include standard part numbers with UL or CSA approvals.

EFFECTED ST	FOR UB2 INDICATORS		
UB215KKW015C	UB225KKG015C	UB226SKW035C	UB201KW035C
UB216KKW015C	UB226KKG015C	UB215SKG035C	UB204KW035C
UB225KKW015C	UB215SKW035C	UB216SKG035C	
UB226KKW015C	UB216SKW035C	UB225SKG035C	
UB215KKG015C	UB225SKW035C	UB226SKG035C	
UB216KKG015C			

Effected part numbers include standard part numbers combined with any cap type or color. Effected part numbers also include standard part numbers with UL approvals.



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