

Change Notice

UB & UB2 Series

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.

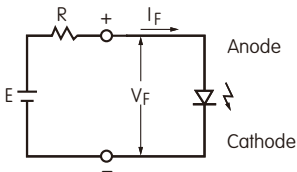


UB & UB2 Series with Bright Red LEDs will Undergo Changes

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.		Before Change	5C
		After Change	5C
Maximum Forward Current	$I_{FM}$	30mA	30mA
Typical Forward Current	$I_F$	20mA	20mA
Forward Voltage	$V_F$	1.85V ( $I_F = 20mA$ )	1.95V ( $I_F = 20mA$ )
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.



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

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

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# Change Notice

## UB & UB2 Series

# 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
UB15NKG015C	UB25NKG015C	UB15SKG035C	UB06BKW035C
UB16NKG015C	UB26NKG015C	UB16SKG035C	—
UB25NKG015C	UB15NBKG015C	UB25SKG035C	—
UB26NKG015C	UB16NBKG015C	UB26SKG035C	—
UB15NBKG015C	UB25NBKG015C	UB15RKG035C	—
UB16NBKG015C	UB26NBKG015C	UB16RKG035C	—
UB25NBKG015C	UB15SKW035C	UB25RKG035C	—
UB26NBKG015C	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 STANDARD PART NUMBERS FOR UB2 SWITCHES			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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