Change Notice HB Series Illuminated Pushbuttons

LED Specification Changes for AT633

Type of Change:

☑ Engineering □ Part Number

Product App

☑ Appearance

The HB Series Illuminated Pushbuttons and Indicators will have changes to the bright LEDs. These changes will effect the illumination of all models, both standard and custom. Differences in the LED specification values are outlined in the following table, in addition to a change of dimensions for AT633 LED.





HB Pushbuttons

HB Indicator

BRIGHT LED CODES & SPECIFICATIONS							
Electrical specifications are determined at a basic temperature of 25°C.		Before Change			After Change		
(+)OO(-)	Color	5C Rec	5D Amber	5F Green	5C Red	5D Amber	5F Green
Maximum Forward Current	I _{FM}	30mA	30mA	25mA	30mA	30mA	30mA
Typical Forward Current	I _F	20mA	20mA	20mA	20mA	20mA	20mA
Forward Voltage		1.85V	2.0V	2.2V	1.95V	2.0V	2.1V
	V_F	(I _F = 20)mA	(I _F = 20)mA	(I _F = 20)mA	(I _F = 20)mA	(I _F = 20)mA	(I _F = 20)mA
Maximum Reverse Voltage	V_{RM}	5V	5V	5V	5V	5V	5V
Current Reduction Rate Above 25°	°C ΔI _F	0.40mA/°C	0.42mA/°C	0.38mA/°C	0.42mA/°C	0.42mA/°C	0.42mA/°C
Ambient Temperature Range		−25°C ~ +50°C		–25°C ~ +50°C			
Bright LED AT633 Change to Dimensions Orientation mark black dot changing to D flat		(3.0) Dia .118 (5.2) .205 Black Dot (+) (-) (-) (-)		(3.0) Dia 118 (5.0) 197 D Flat (+) (-) (126			
The LED circuit is isolated and requires an external power source. If the source voltage exceeds rated voltage a ballast resistor is required $R = \frac{E - V_F}{I_F}$							

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the source voltage exceeds rated voltage, a ballast resistor is required. The resistor value can be calculated by using the formula shown here.

Notes:

There are no changes to external dimensions of switches or indicators. Contact factory if further details are needed.

Effective Date

Changes to AT633 LEDs will be effective February 2015.

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Where: R = Resistor Value (Ohms) E = Source Voltage (V) V_c = Forward Voltage (V)

Forward Current (A)

Cathode

Change Notice HB Series Illuminated Pushbuttons

The AT633 LEDs will have changes that will effect illumination for Red, Amber and Green. These changes will alter all models, both standard and custom, of HB illuminated pushbuttons and indicators. Standard part numbers effected by these changes are listed in the following table.

AT633 LED

BRIGHT LED for HB ILLUMINATED PUSHBUTTONS & INDICATORS				
AT633C Red	AT633D Amber	AT633F Green		

HB SERIES PUSHBUTTONS with BRIGHT LED					
HB15CKW01-5C	HB15CKW01-5D	HB15CKW01-5F			
HB15SKW01-5C	HB15SKW01-5D	HB15SKW01-5F			
HB16CKW01-5C	HB16CKW01-5D	HB16CKW01-5F			
HB16SKW01-5C	HB16SKW01-5D	HB16SKW01-5F			

HB SERIES INDICATORS with BRIGHT LED					
HB01W01-5C	HB01W01-5D	HB01W01-5F			
HB02W01-5C	HB02W01-5D	HB02W01-5F			