

Change Notice

LED Specification Changes for Series M2100 Paddles, MB2400, EB, LB Pushbuttons, AT480 & AT4016 Caps; AT618 LED Dimensions

Type of Change:

- Engineering Part Number
 Product Appearance

1. Change to LED specifications for M2100 LED Tipped Paddle Switches. All M2100 single LED color Paddle Switches will be effected, both standard and custom products.
2. AT618 Single Element LED for Series M2100 J or P Paddles, MB2400 Snap-in Pushbuttons with J Mounting Frame, EB Pushbuttons with Rectangular LED for AT213 Bezel. Effects both standard and custom devices.
3. Changes to AT480 Square Spot Illuminated Cap for Series LB Pushbuttons, including standard and custom part numbers.
4. Changes to AT4016 Round Spot Illuminated Cap for Series LB Pushbuttons, including standard and custom part numbers.

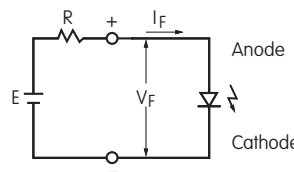
SINGLE LED CODES & SPECIFICATIONS FOR M2100, MB2400, EB, LB, AT480, AT4016

Electrical specifications are determined at a basic temperature of 25°C. Lamp circuit is independent of switch operation.

		Before Change			After Change		
LED Factory Assembled Not Available Separately	Color	C Red	E Yellow	F Green	C Red	E Yellow	F Green
Maximum Forward Current	I_{FM}	10mA	30mA	30mA	25mA	30mA	25mA
Typical Forward Current	I_F	8mA	24mA	24mA	20mA	20mA	20mA
Forward Voltage	V_F	1.9V	2.0V	2.1V	2.25V	2.1V	2.2V
		($I_F = 5$)	($I_F = 20$)	($I_F = 20$)	($I_F = 20$)	($I_F = 20$)	($I_F = 20$)
Maximum Reverse Voltage	V_{RM}	5V	5V	5V	5V	5V	5V
Current Reduction Rate Above 25°C	ΔI_F	0.13mA/°C	0.40mA/°C	0.40mA/°C	0.33mA/°C	0.40mA/°C	0.33mA/°C
Ambient Temperature Range		-25°C ~ +50°C			-25°C ~ +50°C		

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

Notes: New Yellow LED color slightly changed in OFF position. Contact factory if further details are needed.



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

Where: R = Resistor Value (Ohms)
 E = Source Voltage (V)
 V_F = Forward Voltage (V)
 I_F = Forward Current (A)

Effective Date

Changes to LEDs will be effective with October 2013 production.

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Change Notice

1. Single Element LED for M2100 Series

The M2100 Paddles with isolated LED circuit and the synchronous LED circuit will be effected, including standard and custom part numbers.

Part Numbers Effected by Change in LED Specifications for M2100 Paddle Switches

M2112JF	M2112JC	M2112JE
M2112PF	M2112PC	M2112PE
M2113JF	M2113JC	M2113JE
M2113PF	M2113PC	M2113PE

2. AT618 Single Element LED

The LED is used in the following series: M2100 with J or P paddle switches; MB2400 pushbuttons with J mounting frame; EB pushbuttons with AT213 bezel and two rectangular LEDs. Changes to the AT618 will effect both standard and custom devices.

Part Numbers Effected by Changes to AT618 LED

AT618C	AT618E	AT618F
Before Change		After Change

3. AT480 Square Spot Illuminated Cap for LB Series Snap-in Pushbuttons



Part Numbers Effected by Changes to AT480 Cap

AT480FA	AT480CA	AT480EA
AT480FF	AT480CF	AT480EF
AT480FC	AT480CC	AT480EC

4. AT4016 Round Spot Illuminated Cap for LB Series Snap-in Pushbuttons



Part Numbers Effected by Changes to AT4016 Cap

AT4016FA	AT4016CA	AT4016EA
AT4016FF	AT4016CF	AT4016EF
AT4016FC	AT4016CC	AT4016EC