

# Change Notice NP01 Series Illuminated Pushbuttons

## Change of Bicolor LED Specifications

Type of Change:

- Engineering     Part Number  
 Product         Appearance

The NP01 Series Illuminated Pushbuttons will have changes to the bicolor LEDs. The change will effect all bicolor models, both standard and custom. Differences in the LED specification values are outlined in the following table.



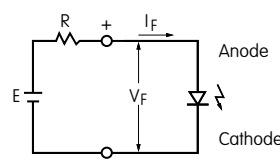
NP01 Pushbutton

### Electrical Specifications for NP01 Bicolor LED

Electrical specifications are determined at a basic temperature of 25°C.		Before Change		After Change		Red/Green Bicolor LED
		CF		CF		
Color		Red	Green	Red	Green	
Maximum Forward Current	$I_{FM}$	50mA (20)	30mA (20)	30mA (25)	25mA (25)	
Typical Forward Current	$I_F$	20mA (15)	20mA (7.5)	20mA (20)	16mA (5)	
Typical Forward Current for Alternating Legends	$I_F$	30mA	25mA	20mA	16mA	
Forward Voltage	$V_F$	2.0V	3.5V	1.95V	3.3V	
Maximum Reverse Voltage	$V_{RM}$	5V	5V	5V	5V	
Current Reduction Rate	$\Delta I_F$	0.88mA/°C above 40°C	0.48mA/°C above 30°C	0.40mA/°C above 25°C	0.33mA/°C above 25°C	
Ambient Temperature Range		-25° ~ +50°C		-25° ~ +50°C		

#### Notes

- Specifications in ( ) in table above denote simultaneous illumination of Red and Green.
- LEDs are an integral part of the switch and are not available separately.
- If the source voltage exceeds the rated voltage, a ballast resistor is required. The resistor value can be calculated by using the formula shown here.
- The changes to bicolor LEDs do not affect any external dimensions of the switches.
- Contact the 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)

### NP01 Part Numbers Affected by Bicolor LED Specification Changes

NP0115AG03LCF-JB	NP0115AG03LCF-J01	NP0115AG03LCF-J02	NP0115AG03LCF-J03
NP0115HG03LCF-JB	NP0115HG03LCF-J01	NP0115HG03LCF-J02	NP0115HG03LCF-J03

#### Effective Date

Changes to Bicolor LEDs will be effective April 2015.

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