

# Change Notice

# A Indicators

## Changes to LED Specifications for A Series Indicators

Type of Change:

- Engineering     Part Number  
 Product         Appearance

The LEDs for A Series Indicators will be changing. This will result in different electrical values from the previous LEDs for Red, Yellow and Green. The revision applies to standard and custom indicators. Following are comparisons between the specifications and a table of effected standard part numbers.



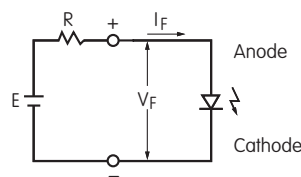
A Series Indicators with Red, Yellow or Green LEDs will Change

### CHANGES TO LED SPECIFICATIONS

Electrical specifications are determined at a basic temperature of 25°C.		Before Change			After Change		
		<b>C</b>	<b>E</b>	<b>F</b>	<b>C</b>	<b>E</b>	<b>F</b>
LED is colored in OFF state	Color	Red	Yellow	Green	Red	Yellow	Green
Maximum Forward Current	$I_{FM}$	50mA	50mA	50mA	30mA	30mA	30mA
Typical Forward Current	$I_F$	30mA	30mA	30mA	20mA	20mA	20mA
Forward Voltage	$V_F$	1.7V	2.2V	2.1V	2.1V	2.1V	2.2V
		$I_F = 30mA$	$I_F = 30mA$	$I_F = 30mA$	$I_F = 20mA$	$I_F = 20mA$	$I_F = 20mA$
Maximum Reverse Voltage	$V_{RM}$	4V	4V	4V	5V	5V	5V
Current Reduction Rate Above 25°C	$\Delta I_F$	0.67mA/°C	0.67mA/°C	0.67mA/°C	0.40mA/°C	0.40mA/°C	0.40mA/°C
Ambient Temperature Range		-30°C ~ +85°C			-30°C ~ +85°C		

#### Notes

- The LED circuit is isolated and requires an external power source.
- If the source voltage is greater than the LED's rated voltage, a ballast resistor must be connected in series with the LED. The resistor value can be calculated by using the formula shown here.
- There are no changes to any other specifications or external dimensions.
- 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)

### A Indicator Part Numbers

A01BC	A01HC	A01PC	A01VC
A01BE	A01HE	A01PE	A01VE
A01BF	A01HF	A01PF	A01VF

#### Effective Date

LED changes for A Series Indicators will be effective April 2019.

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