

# Change Notice

# A Indicators

## Changes to LED Specifications for A Series Indicators

Type of Change:

- Engineering     Part Number  
 Product         Appearance

**CN-0338 was originally released August 2018. NKK Switches needs to add that there will also be a change to the Ambient Temperature Range in the LED Specifications. That is the only difference between the original Change Notice and this reissued version, effective April 26, 2019 (CN-0338 Revised).**



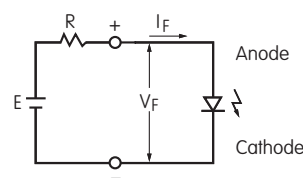
**A Series Indicators with Red, Yellow or Green LEDs will Change**

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.

| 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 |              |              | -25°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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