# **Change Notice**

### **A Indicators**

## Changes to LED Specifications for A Series Indicators

Type of Change:

☑ 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).



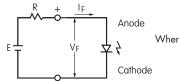
The LEDs for A Series Indicators will be changing. This will result in different electrical values from the previous LEDs for Red, Yellow and Green. The revision applies to standard and custom indicators. Following are comparisons between the specifications and a table of effected standard part numbers.

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			
		C	E	F	C	E	F	
LED is colored in OFF state	Color	Red	Yellow	Green	Red	Yellow	Green	
Maximum Forward Current	I <sub>FM</sub>	50mA	50mA	50mA	30mA	30mA	30mA	
Typical Forward Current	I <sub>F</sub>	30mA	30mA	30mA	20mA	20mA	20mA	
Forward Voltage	$V_{\scriptscriptstyle F}$	1.7V	2.2V	2.1V	2.1V	2.1V	2.2V	
		I <sub>F</sub> = 30mA	I <sub>F</sub> = 30mA	I <sub>F</sub> = 30mA	I <sub>F</sub> = 20mA	I <sub>F</sub> = 20mA	I <sub>F</sub> = 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.



 $R = \frac{1}{I_F}$ 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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