Contact No. 216

Change Notice

TL, HB, KB, LB, YB, YB2 Series

LED Specification Changes for TL Toggles, HB, KB, LB, YB, YB2 Pushbuttons & Indicators, AT624, AT625, AT630, AT632 LEDs

Type of Change:

☑ Engineering ☐ Part Number
☑ Product ☑ Appearance

1. Changes to LED specifications for TL Series Illuminated Toggles. TL Series Super Bright LEDs in Green (6F) and Blue (6G) will be effected, both standard and custom products.
2. Changes to LED specifications for HB Series Illuminated Pushbuttons and Indicators with Super Bright Green (6F) and Blue (6G) LEDs. AT624G and AT630F LEDs will have specification changes for standard and custom part numbers.
3. For KB, LB, YB and YB2 Series Illuminated Pushbutton switches and KB, LB and YB indicators, AT625G and AT632F LEDs will have specification changes for standard and custom part numbers.

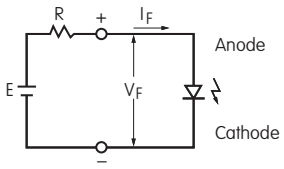
1. TL Series Toggles

The changes to specifications for Super Bright LEDs 6F and 6G will effect both standard and custom devices.

SUPER BRIGHT LED CODES & SPECIFICATIONS

	ATTENTION ELECTROSTATIC SENSITIVE DEVICES		Before Change		After Change	
Super Bright LEDs are Electrostatic Sensitive	LED Factory Assembled **Not Available Separately**	Color	6F Green	6G Blue	6F Green	6G Blue
	Maximum Forward Current	I_{FM}	30mA	30mA	30mA	30mA
Electrical specifications are determined at a basic temperature of 25°C. Lamp circuit is independent of switch operation.	Typical Forward Current	I_F	20mA	20mA	20mA	20mA
	Forward Voltage	V_F	3.5V	3.6V	3.3V	3.3V
			(I_F = 20)	(I_F = 20)	(I_F = 20)	(I_F = 20)
	Maximum Reverse Voltage	V_{RM}	5V	5V	7V	7V
	Current Reduction Rate Above 25°C	ΔI_F	0.50mA/°C	0.50mA/°C	0.40mA/°C	0.40mA/°C
	Ambient Temperature Range		−10°C ~ +55°C		−10°C ~ +55°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.



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

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

Notes:

There are no changes to LED specifications and external dimensions for the White LED (6B).
Contact factory if further details are needed.

Effective Date

Changes to LEDs will be effective with December 2013 production.

NKK SWITCHES http://www.nikkaiswitches.com E-mail: overseas@nikkai.co.jp

Nihon Kaiheiki Ind. Co., Ltd.

715-1 Unane, Takatsu-ku, Kawasaki-shi, 213-8553 Japan TEL: +81 44 813 8008 FAX: +81 44 813 8038

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NKK SWITCHES

2. HB Series Pushbuttons and Indicators

The changes to Super Bright LEDs AT624G and AT630F specifications will effect both standard and custom devices.

SUPER BRIGHT LED CODES & SPECIFICATIONS

Super Bright LEDs are Electrostatic Sensitive.

Electrical specifications are determined at a basic temperature of 25°C. Lamp circuit is isolated and requires external power source. If source voltage exceeds rated voltage, a ballast resistor is required. The resistor value can be calculated by using the formula on Page 1.

ATTENTION ELECTROSTATIC SENSITIVE DEVICES		Before Change		After Change	
Color		6F Green	6G Blue	6F Green	6G Blue
Maximum Forward Current	I_{FM}	30mA	30mA	30mA	30mA
Typical Forward Current	I_F	20mA	20mA	20mA	20mA
Forward Voltage	V_F	3.5V (I_F = 20)	3.6V (I_F = 20)	3.3V (I_F = 20)	3.3V (I_F = 20)
Maximum Reverse Voltage	V_{RM}	5V	5V	7V	7V
Current Reduction Rate Above 25°C	ΔI_F	0.50mA/°C	0.50mA/°C	0.40mA/°C	0.40mA/°C
Ambient Temperature Range		−25°C ~ +50°C		−25°C ~ +50°C	

Note: There are no changes to LED specifications or external dimensions for the White LED (6B).

3. KB, LB, YB and YB2 Series Pushbuttons and KB, LB and YB Indicators

The changes to Super Bright LEDs AT625G and AT632F specifications will effect both standard and custom devices.

SUPER BRIGHT LED CODES & SPECIFICATIONS

Super Bright LEDs are Electrostatic Sensitive.

Electrical specifications are determined at a basic temperature of 25°C. Lamp circuit is isolated and requires external power source. If source voltage exceeds rated voltage, a ballast resistor is required. The resistor value can be calculated by using the formula on Page 1.

ATTENTION ELECTROSTATIC SENSITIVE DEVICES		Before Change		After Change	
Color		6F Green	6G Blue	6F Green	6G Blue
Maximum Forward Current	I_{FM}	30mA	30mA	30mA	30mA
Typical Forward Current	I_F	20mA	20mA	20mA	20mA
Forward Voltage	V_F	3.5V (I_F = 20)	3.6V (I_F = 20)	3.3V (I_F = 20)	3.3V (I_F = 20)
Maximum Reverse Voltage	V_{RM}	5V	5V	7V	7V
Current Reduction Rate Above 25°C	ΔI_F	0.50mA/°C	0.50mA/°C	0.40mA/°C	0.40mA/°C
Ambient Temperature Range		−25°C ~ +50°C		−25°C ~ +50°C	

Note: There are no changes to LED specifications or external dimensions for the White LED (6B).

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Nihon Kaiheiki Ind. Co., Ltd.
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