

Change Notice

Super Bright LED Specifications

Type of Change:

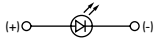

- Engineering Part Number
 Product Appearance

The TL Series has had modifications to the LED specifications for the super bright option. The changes are for the blue and green LEDs, and will affect standard and custom devices. Part numbers included in this change are:

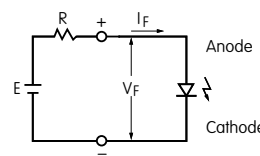
- TL22DNAW016F (Green) TL22DNAW016G (Blue)
 TL22SNAG016F (Green) TL22SNAG016G (Blue)



TL Illuminated Toggle

LED Specifications							
Super Bright LED 		From Current LED Specifications			To New LED Specifications		
		6B White	6F Green	6G Blue	6B White	6F Green	6G Blue
Forward Peak Current	I_{FM}	30mA	30mA	30mA	30mA	30mA	30mA
Continuous Forward Current	I_F	20mA	20mA	20mA	20mA	20mA	20mA
Forward Voltage ($I_F = 20mA$)	V_F	3.6V	3.3V	3.4V	3.6V	3.5V	3.6V
Reverse Peak Voltage	V_{RM}	5V	5V	5V	5V	5V	5V
Current Reduction Rate Above 25°C	ΔI_F	0.50mA/°C	0.40mA/°C	0.40mA/°C	0.50mA/°C	0.50mA/°C	0.50mA/°C
Ambient Temperature Range		-10°C ~ +55°C			-10°C ~ +55°C		

LED is an integral part of the switch and not available separately.
 The LED circuit is independent of switch operation.
 Electrical specifications are determined at a basic temperature of 25°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 is no change to the specifications of the white LED.
 There is no change to the dimensions of the switches.
 Due to the change of Forward Voltage (V_F), the external resistor value will be affected. Contact the factory if further details are needed.

Availability

TL Series with new LED specifications will be available with June 2009 production.

Nihon Kaiheiki Ind. Co., Ltd.

715-1 Unane, Takatsu-ku, Kawasaki-shi, 213-8553, Japan
 Telephone +81-44-813-8008 • Fax +81-44-813-8038



www.nikkaiswitches.com