

# Change Notice

## TL Series

### Change of Super Bright LED Specifications for TL22DNAW016G (Blue LED)

Type of Change:


- Engineering     Part Number  
 Product         Appearance

The TL Series illuminated toggle TL22DNAW016G with the blue super bright LED will have changes to the specifications. The table below displays before and after modifications for this part number.

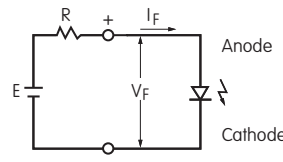


TL22DNAW016G

#### SUPER BRIGHT LED CODES & SPECIFICATIONS

Super Bright LEDs are Electrostatic Sensitive.		Color	Before Change	After Change
			<b>6G</b> Blue	<b>6G</b> Blue
Electrical specifications are determined at a basic temperature of 25°C. The lamp circuit is isolated and requires an external power source.	Maximum Forward Current	$I_{FM}$	30mA	30mA
	Typical Forward Current	$I_F$	20mA	20mA
	Forward Voltage	$V_F$	3.6V	<b>3.3V</b>
			( $I_F = 20$ )	( $I_F = 20$ )
	Maximum Reverse Voltage	$V_{RM}$	5V	<b>7V</b>
	Current Reduction Rate Above 25°C	$\Delta I_F$	0.50mA/°C	<b>0.40mA/°C</b>
Ambient Temperature Range		-10°C ~ +55°C	-10°C ~ +55°C	

If the source voltage exceeds the 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)

Contact factory if further details are needed.

#### Effective Date

Changes to LEDs will be effective with January 2014 production.

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