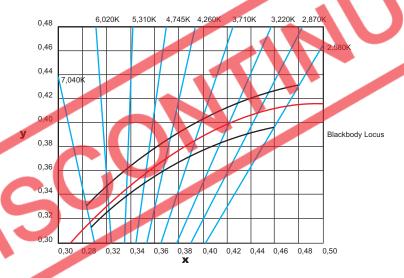
### **Electrical and Optical Specifications\***

LED Module Part Number	Color Temperature	Max Input Current	Forward Voltage	Rated Power	Luminous Flux Nominal ±1%	Efficiency	Beam Angle	CRI	Dimmable
TM06LN1327-001	2700K	350 - 700 mA	18 - 19.6 VDC	6.3 - 13.8 W	550 - 1025 lumens	67 lm/W	120°	>80	<b>√</b>
TM06LN1330-001	3000K	350 - 700 mA	18 - 19.6 VDC	6.3 - 13.8 W	600 - 1125 lumens	71 lm/W	120°	>80	√
TM06LN1335-001	3500K	350 - 700 mA	18 - 19.6 VDC	6.3 - 13.8 W	600 - 1125 lumens	71 lm/W	120°	>80	1
TM06LN1340-001	4000K	350 - 700 mA	18 - 19.6 VDC	6.3 - 13.8 W	650 - 1250 lumens	80 lm/W	120°	>80	1
TM06LN1350-001	5000K	350 - 700 mA	18 - 19.6 VDC	6.3 - 13.8 W	625 - 1200 lumens	80 lm/W	120°	>80	1
TM06LN1365-001	6500K	350 - 700 mA	18 - 19.6 VDC	6.3 - 13.8 W	625 - 1200 lumens	80 lm/W	120°	>80	1

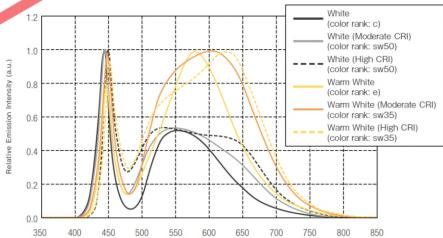
<sup>\*</sup> Performance based on 25°C ambient temperature. Note: Specifications are subject to change without notice.

#### **Color and Binning**



Ref. Nichia Chromaticity Diagram for ANSI bins

## **Optical Spectrum \*\***



Ref. Nichia LED Catalogue 2013

Fulham extends a limited warranty only to the original purchaser or to the first user for a period of 3 years from the date of manufacture when properly installed and operated under normal conditions of use. For complete terms and conditions, please reference the Fulham product catalog (www.fulham.com) Due to a program of continuous improvement, Fulham reserves the right to make modifications or variations in design or construction to the equipment described.

<sup>\*\*</sup> Value varies depending on product type and color rank



### **Mechanical Specifications**

Part Number * **	Board Material & Dimensions	Module Weight	Connection	Attachment	Conformal Coating	Standard	Optional
TM06LN13xx-001	Aluminum Clad 280x20x1.6 mm 11.02x0.79x0.063" (+/- 10%)	30 g	Stranded Wire Leads / 22 AWG	#6 or M3 Pan Head screw		1	
TM06LN13xx-101	Aluminum Clad 280x20x1.6 mm 11.02x0.79x0.063" (+/- 10%)		Single Wire Connector	#6 or M3 Pan Head screw		0	√
TM06LN13xx-201	Aluminum Clad 280x20x1.6 mm 11.02x0.79x0.063" (+/- 10%)		Dual Wire Connector	#6 or M3 Pan Head screw			J
TM06LN13xx-y01T	Aluminum Clad 280x20x1.6 mm 11.02x0.79x0.063" (+/- 10%)		Leads or Connectors	3M Double-Sided Tape			√
TM06LN13xx-y016	Aluminum Clad 280x20x1.6 mm 11.02x0.79x0.063" (+/-10%)	<b>SC</b>	Leads or Connectors	#6 or M3 Pan Head screw	Environment and Moisture Protection per IPC-CC-830		√
TM06LN13xx-y01B	Aluminum Clad 280x20x1.6 mm 11.02x0.79x0.063" (+/- 10%)		Leads or Connectors	3M Double-Sided Tape	Environment and Moisture Protection per IPC-CC-830		1

<sup>\*</sup> xx = 27, 30, 35, 40, 50, or 65 for respective color temperature \*\* y = 0, 1, or 2 for respective connection method

### **Mounting Methods**

- 1. If mounting by screw hole, use any screw with diameter less than 4.17mm. Use all available screw holes to ensure good contact between back side of module and mounting surface.
- 2. If mounting using double-sided tape, peel backing and place LED module on mounting surface. Firmly press down on the module to ensure good adherence. Follow the double-side tape manufacturer's installation instructions.
- 3. If connectors are used, use solid wire size 24 18 AWG, rated at a minimum 50V, minimum 105°C, and stripped to length between 6-7 mm (0.24-0.28 inches). Push button for insertion of conductor and for easy removal of wires.

### **Mechanical Drawings**

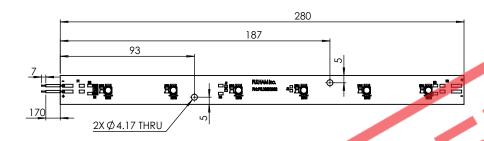
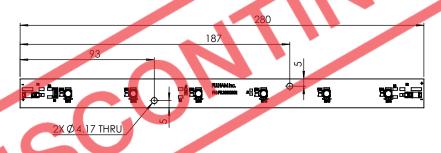


Figure 1: TM06LN13xx-001 with



x-101 with 2 Single Wire Connectors

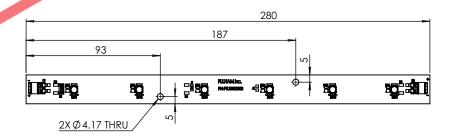


Figure 3: TM06LN13xx-201 with 2 Double Wire Connectors

### **NOTE:**

Modules are polarity sensitive.

Ensure that "positive" from LED driver is connected to "positive" of LED modules and that "negative" from Polarities of modules are marked with "+" for positive and "-" for negative.



### **Reliability and Life Specifications**

Lumen Maintanance	L70 >36,000 Hrs based on LM80 Data at Case Temperature of 55°C and 800 mA Driver Current
Color Consistency	Binning per ANSI C78.377-2008; 7 SDCM
Energy Star for Luminaires Compliant	Indoor Fixture types for Ts ≤ 105°C; Outdoor Fixtures for Ts ≤ 85°C
DLC Compliant	Categories 11-16 for Ts ≤ 85°C
Certifications	cURus, Class 2 Lighting Systems, RoHS
UL Part Number	PTL103X2102 (File # E351548)
Fulham Warranty	3 Years

#### **Environmental Rating**

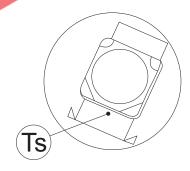
Modules are rated for dry locations, unless option for conformal coating is requested.

#### **Electrostatic Sensitive Product (ESD)**

Fulham LED products should be handled with proper measures to protect against any potential ESD damage. When servicing, personnel should be ground and direct contact with LED should be avoided.

### **Thermal Specifications**

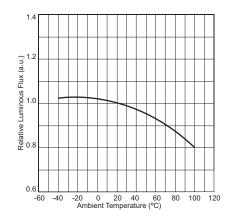
	With Connectors	Without Connectors
Maximum Storage Temperature	-35 to 100°C	-40 to 100°C
Maximum Operating Ambient Temperature	-35 to 100°C	-40 to 100°C
Maximum Solder Pad Temperature	105°C	105°C
Thermal Pad Recommended	Yes	Yes



#### Thermal Management

Proper thermal management should be employed to ensure life and reliability of product. Use thermal grease, paste, pad, or other material interface is highly recommended.

### Thermal De-Rating



Ref. Nichia NS6L(W)183B Spec Sheet