

**Rocker/Paddle Switches, TRD Series Part Number Matrix**

**MATERIAL SPECIFICATIONS:**

Movable Contacts .....Copper alloy w/silver inlay contact or gold plate  
 Terminals/Fixed Contacts.....Copper alloy w/silver inlay contact or gold plate  
 Terminal Seal .....Epoxy  
 Housing/Beveled Frame .....Polyamide, black matte finish

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Silver: 3A max. @ 125 VAC, option 3  
 Gold: 0.4VA max. @ 20 VDC, option 1  
 Initial Contact Resistance .....20 Milliohms max.  
 Static Withstanding.....15KV, per IEC 801-2  
 Insulation Resistance .....1,000 Megohms min. @ 500 VDC  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Electrical Life .....2 Pos. 20K cycles @ full rated 3A load, 80K @ 0.4VA, 3 pos. 10K cycles @ full rated 3A load, 60K @ 0.4VA

**ENVIRONMENTAL SPECIFICATIONS:**

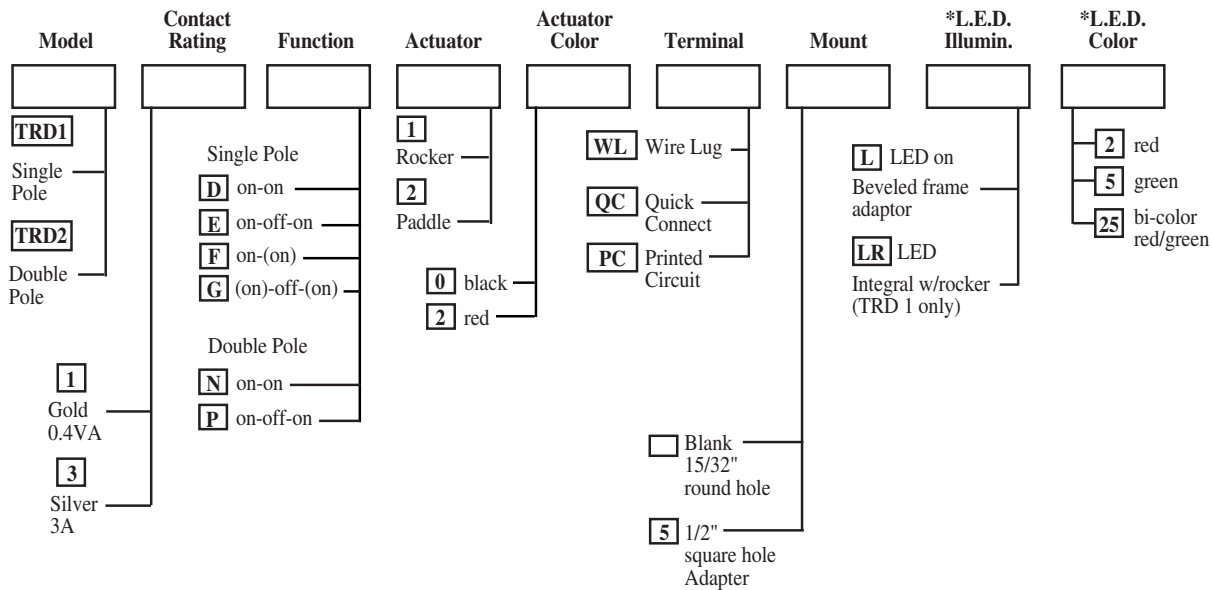
Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-49°F to +199°F (-45°C to +93°C)  
 Solder Heat Resistance .....Meets MIL-STD-202, method 210

**\*NOTICE: Caution should be used when hand-soldering. Solder heat Resistance -550°-600°F for less than 5 seconds. Solder with the switch in the closed position.**

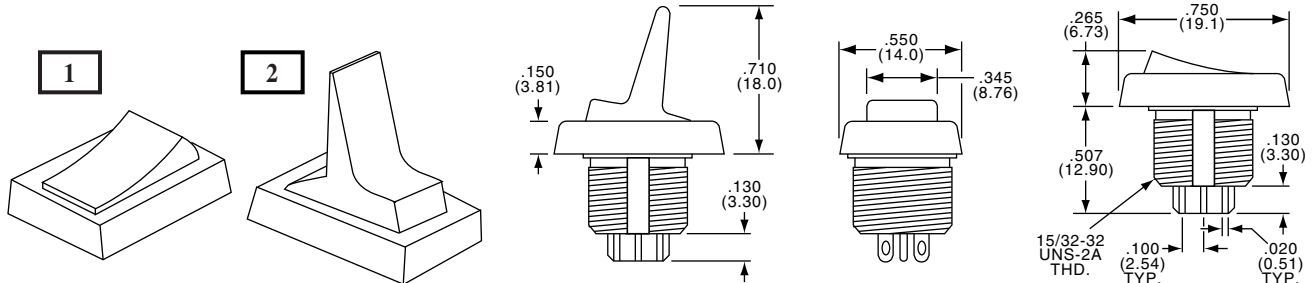
UL options available, consult Tyco Electronics Product Information Center

**HOW TO ORDER**

\* Leave blank if LED not required.



**ACTUATORS**

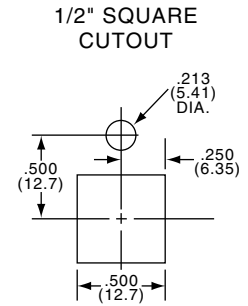
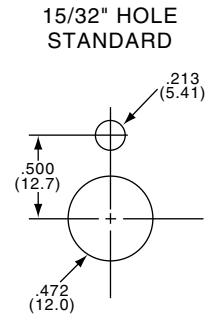
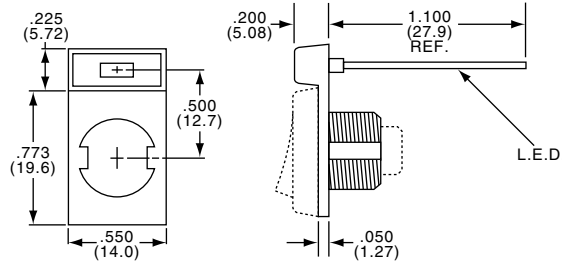




**Rocker/Paddle Switches, TRD Series Options**

**L** L.E.D. BEVELED FRAME ADAPTOR  
(Accepts rectangular L.E.D.)

**MOUNTING**






**Material:** Nylon 6/6  
**Color/Finish:** Black, matte

**Recommended Panel Thickness:** .030 to .220:

**Recommended Panel Thickness:** .030 to .095"

**FUNCTIONS**

				
Single Pole	Double Pole	123 456	123 456	123 456
<input type="checkbox"/> D	<input type="checkbox"/> N	On	None	On
<input type="checkbox"/> E	<input type="checkbox"/> P	On	Off	On
<input type="checkbox"/> F		On	None	(On)
<input type="checkbox"/> G		(On)	Off	(On)
SPDT Terminals Connected		2-3	---	1-2
DPDT Terminals Connected		2-3 5-6	---	1-2 4-5

**None** No mechanical position

**Off** Mechanical position, no electrical connection

**(On)** Momentary mechanical position, and electrical connection

\* Refer to Pages F3-F5 for Other Options \*

**Rocker Switches, TRD Series Illuminated or Non-Illuminated, Wire Lug**

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold over nickel or silver plate  
 Case Material .....Polyamide, black matte finish  
 Actuator Material .....Polyamide  
 Terminals/Fixed Contacts.....Copper alloy with gold or silver plate  
 Terminal Seal .....Epoxy

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +176°F (-20°C to +80°C)  
 Storage Temperature.....-49°F to +199°F (-45°C to +93°C)

**TYPICAL PERFORMANCE CHARACTERISTICS:**

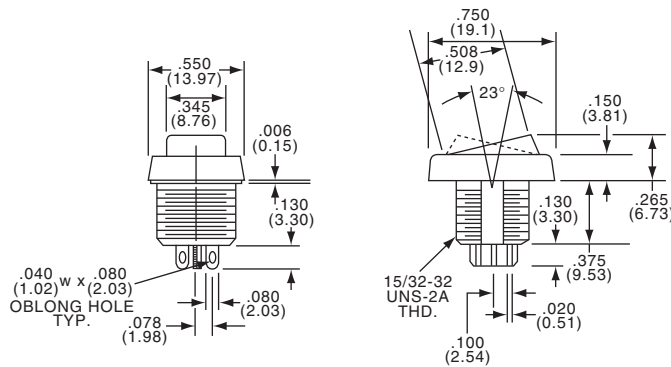
Contact Rating .....0.4 VA Max. @ 20 VDC or peak AC  
 3 A @ 125 VAC or 28 VDC (2 pos.) 2A  
 Initial Contact Resistance .....20 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms min.  
 Dielectric Strength .....500 Volts RMS @ sea level  
 Actuator Travel.....23°  
 Life Expectancy .....2 Pos. - Up to 100,000 actuations  
 3 Pos. - Up to 50,000 actuations

**NOTE: Part numbering matrix page F3**

**NOTE: When hand soldering, solder with switch in closed position. Solder temperature 550-600°F less than 5 seconds.**

F

TRD Series



DPDT

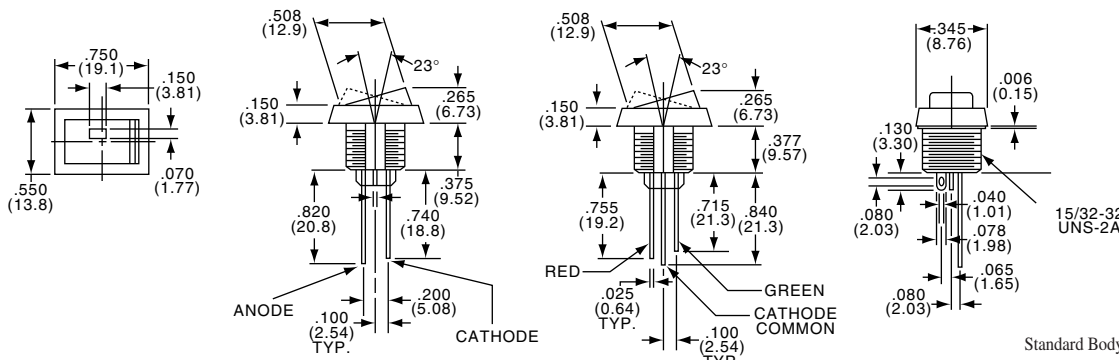


TRD21N10WL

Standard Body Color - (Black)

Model	Type	Function	Act. Code Pg. M5	Contact	Terminal	Model	Type	Function	Act. Code Pg. M5	Contact	Terminal
TRD11D1(*)WL	SPDT	On None On	1	Gold	Wire Lug	TRD13D1(*)WL	SPDT	On None On	1	Silver	Wire Lug
TRD11E1(*)WL	SPDT	On Off On	5	Gold	Wire Lug	TRD13E1(*)WL	SPDT	On Off On	5	Silver	Wire Lug
TRD11F1(*)WL	SPDT	On None (On)	1	Gold	Wire Lug	TRD13F1(*)WL	SPDT	On None (On)	1	Silver	Wire Lug
TRD21N1(*)WL	DPDT	On None On	2	Gold	Wire Lug	TRD23N1(*)WL	DPDT	On None On	2	Silver	Wire Lug
TRD21P1(*)WL	DPDT	On Off On	6	Gold	Wire Lug	TRD23P1(*)WL	DPDT	On Off On	6	Silver	Wire Lug

(\*) Specify rocker color by adding suffix number: (0) Black (2) Red, (On) indicates momentary position.



SPDT



TRD11D10WLLR

Standard Body and Rocker Color - (Black)

**ILLUMINATED**

**ILLUMINATED**

Model	Type	Function	Act. Code Pg. M5	Contact	Terminal	Model	Type	Function	Act. Code Pg. M5	Contact	Terminal
TRD11D10WLLR(*)	SPDT	On None On	1	Gold	Wire Lug	TRD13D10WLLR(*)	SPDT	On None On	1	Silver	Wire Lug
TRD11E10WLLR(*)	SPDT	On Off On	5	Gold	Wire Lug	TRD13E10WLLR(*)	SPDT	On Off On	5	Silver	Wire Lug
TRD11F10WLLR(*)	SPDT	On None (On)	1	Gold	Wire Lug	TRD13F10WLLR(*)	SPDT	On None (On)	1	Silver	Wire Lug

(\*) Specify LED color by adding suffix number: (2) Red, (5) Green, (25) Red/Green - Bi-color (On) indicates momentary position.

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Catalog 1308390  
 Issued 9-04

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in parentheses or brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752  
 Canada: 1-905-470-4425  
 Mexico: 01-800-733-8926  
 C. America: 52-55-5-729-0425

South America: 55-11-3611-1514  
 Hong Kong: 852-2735-1628  
 Japan: 81-44-844-8013  
 UK: 44-141-810-8967