

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Rocker Switch TRD Series For Additional Options Refer to Page E4-E6

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 $-4^{\circ}F$ to $+176^{\circ}F$ ($-20^{\circ}C$ to $+80^{\circ}C$) Storage Temperature-49°F to +199°F (-45°C to +93°C)

NOTE: Part numbering sequence page E4

TYPICAL PERFORMANCE CHARACTERISTICS:

Contact Rating 0.4 VA Max. @ 20 VDC or peak AC 3 A @ 125 VAC or 28 VDC (2 pos.) 2A

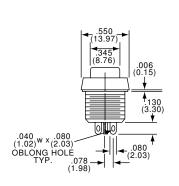
Initial Contact Resistance 20 Milliohms max. Contact Timing Break-before-make Insulation Resistance 1,000 Megohms min. Dielectric Strength 500 Volts RMS @ sea level

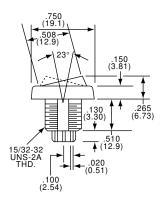
Actuator Travel 23°

Life Expectancy 2 Pos. - 100,000 actuations 3 Pos. - 50,000 actuations

UL recognized under the Component Program of Underwriters Laboratories Inc. File #E46765

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

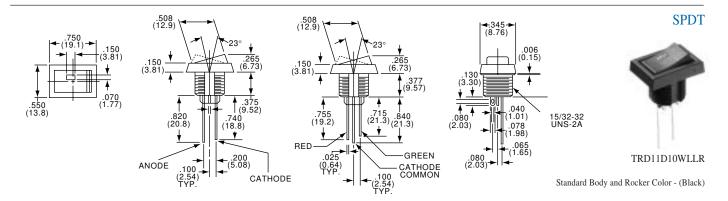






TRD21N10WL Standard Body Color - (Black)

Model	Туре	Function	Act. Code Pg. M8	Contact	Terminal	Model	Type	Function	Act. Code Pg. M8	Contact	Terminal
TRD11D1(*)WL TRD11E1(*)WL TRD11F1(*)WL TRD21N1(*)WL TRD21P1(*)WL TRD21R1(*)WL (*) Specify rocker of	SPDT SPDT SPDT DPDT DP3T DPDT color by addin	On None On On On Off On On None (On) On None On On On None (On) On None (On) og suffix number: (0)	1 5 1 2 6 2 Black (2) Red,	Gold Gold Gold Gold Gold Gold (6) Blue (9)	Wire Lug Wire Lug Wire Lug Wire Lug Wire Lug Wire Lug Yellow,	TRD13D1(*)WL TRD13E1(*)WL TRD13F1(*)WL TRD23N1(*)WL TRD23P1(*)WL TRD23R1(*)WL	SPDT SPDT SPDT DPDT DP3T DPDT (On) ind	On None On On Off On None (On) On None On On Off On On None (On) On None (On) icates momentary posi	1 5 1 2 6 2	Silver Silver Silver Silver Silver	Wire Lug Wire Lug Wire Lug Wire Lug Wire Lug Wire Lug



Model	Туре		Functio	n	Act. Code Pg. M8	Contact	Terminal	Model	Ty	pe	Function	Act. Code Pg. M8	Contact	Terminal
TRD11D10WLLR(*) TRD11E10WLLR(*) TRD11F10WLLR(*) (*) Specify LED color	SPDT SP3T SPDT by adding s	On On On suffix r	None Off None number:	On (On)	1 5 1 1, (4) Yellow, (Gold Gold Gold 5) Green, (2:	Wire Lug Wire Lug Wire Lug 5) Red/Green -	TRD13D10WLL TRD13E10WLLI TRD13F10WLLI Bi-color (On) in	R(*) R(*)	SPDT SP3T SPDT momentar	On None O On Off O On None (O	n 5	Gold Gold Gold	Wire Lug Wire Lug Wire Lug

TRD Series Rocker/Paddle • How To Order

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

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

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

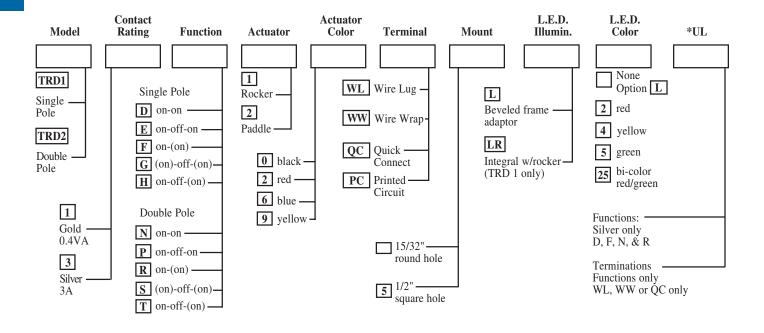
@ 0.4VA, 3 pos. 10K cycles @ full rated 3A load, 60K @ 0.4VA

*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.

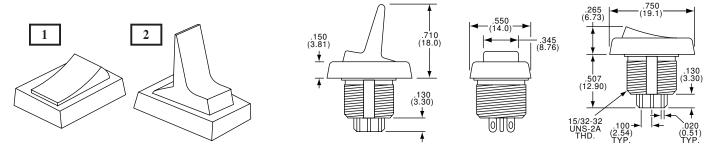
UL recognized under the Component Program of Underwriters Laboratories Inc. File #E46765

HOW TO ORDER

See pages M2-M4 for application specific indexing.



ACTUATORS

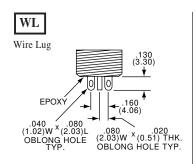


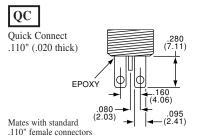


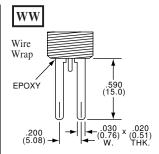
How To Order • Rocker/Paddle TRD Series

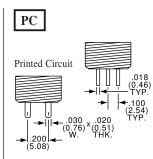
TERMINATIONS

(Epoxy seal standard)



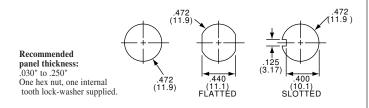






15/32" HOLE STANDARD

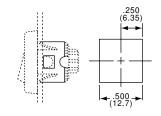
Standard TRD bushing will mount in any hole shown below.



1/2" SQUARE CUTOUT SNAP-IN ADAPTOR

Recommended panel thickness: 030" to 125

Material: bright stainless steel To specify adaptor separately, use P/N TRD10793



CONTACTS/RATING/UL RECOGNITION

0.4VA Max. @ 20 VDC

Movable Contact: Copper alloy, gold plate Fixed Contact/Terminal: Copper alloy, gold plate

3 3A Max. @ 125 VAC

Movable Contact: Copper alloy, silver inlay Fixed Contact/Terminal: Copper alloy, silver inlay

UL

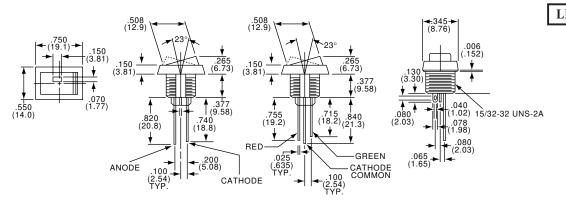
For contact option 3 Rating: 3A, 120 VAC(Resistive) File: E46765

Underwriters Laboratories, Inc. marking stamped under beveled frame.

L.E.D. ILLUMINATION -SINGLE AND BI-COLOR

L.E.D. Integral (Rocker Actuator)

All SPDT functions



Standard mounting dimensions apply, L.E.D. supplied in 2 red, 4 yellow, 5 green, or 25 red/green. L.E.D. Specifications: Max Voltage: 2.8 VDC

Max. Forward Current: red-20mA, Yellow-25 mA, green-25 mA, red/green-40 mA.

TRD Series Rocker/Paddle • How To Order

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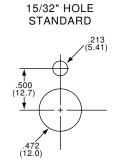
L.E.D. BEVELE FRAME ADAPTOR

(Accepts rectangular L.E.D.)

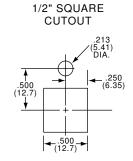
1.100 (27.9) REF. L.E.D.

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

MOUNTING



Recommended Panel Thickness: .030 to .220:



Recommended Panel Thickness: .030 to .095'

FUNCTIONS

Single Pole	Double Pole	123 456	123 456	123 456
D	N	On	None	On
Е	P	On	Off	On
F	R	On	None	(On)
G	S	(On)	Off	(On)
Н	Т	On	Off	(On)
SPDT				
Terminal	s Connected	2-3		1-2
DPDT				
Terminal	s Connected	2-3 5-6		1-2 4-5

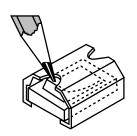
No mechanical position None Off Mechanical position,

no electrical connection

(On) Momentary mechanical position,

electrical connection

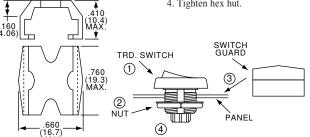
SWITCH GUARD



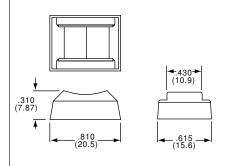
Recommended Panel Thickness: 15/32" hole standard - .030 to .220 15/32" square cutout - .030 to .095

Material: Nylon 6/6 Color/Finish: Black matte, Specify separately, P/N TRD10979





ROCKER BOOT SEAL



To specify boot seal use P/N TRD11494

