

TRD Series

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.

NOTE: Part numbering sequence page E4



TRD21N10WL

Standard Body Color - (Black)

Model	Type	Function			Act. Code Pg. M8	Contact	Terminal	Model	Type	Function			Act. Code Pg. M8	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	DP3T	On	Off	On	6	Gold	Wire Lug	TRD23P1(*)WL	DP3T	On	Off	On	6	Silver	Wire Lug
TRD21R1(*)WL	DPDT	On	None	(On)	2	Gold	Wire Lug	TRD23R1(*)WL	DPDT	On	None	(On)	2	Silver	Wire Lug

(*) Specify rocker color by adding suffix number: (0) Black (2) Red, (6) Blue (9) Yellow,
(On) indicates momentary position.



TRD11D10WLLR

Standard Body and Rocker Color - (Black)

Model	Type	Function			Act. Code Pg. M8	Contact	Terminal	Model	Type	Function			Act. Code Pg. M8	Contact	Terminal
TRD11D10WLLR(*)	SPDT	On	None	On	1	Gold	Wire Lug	TRD13D10WLLR(*)	SPDT	On	None	On	1	Gold	Wire Lug
TRD11E10WLLR(*)	SP3T	On	Off	On	5	Gold	Wire Lug	TRD13E10WLLR(*)	SP3T	On	Off	On	5	Gold	Wire Lug
TRD11F10WLLR(*)	SPDT	On	None	(On)	1	Gold	Wire Lug	TRD13F10WLLR(*)	SPDT	On	None	(On)	1	Gold	Wire Lug

(*) Specify LED color by adding suffix number: (2) Red, (4) Yellow, (5) Green, (25) Red/Green - Bi-color (On) indicates momentary position.

AUGAT Inc.

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(508) 699-9800 FAX (800) 533-2526

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.

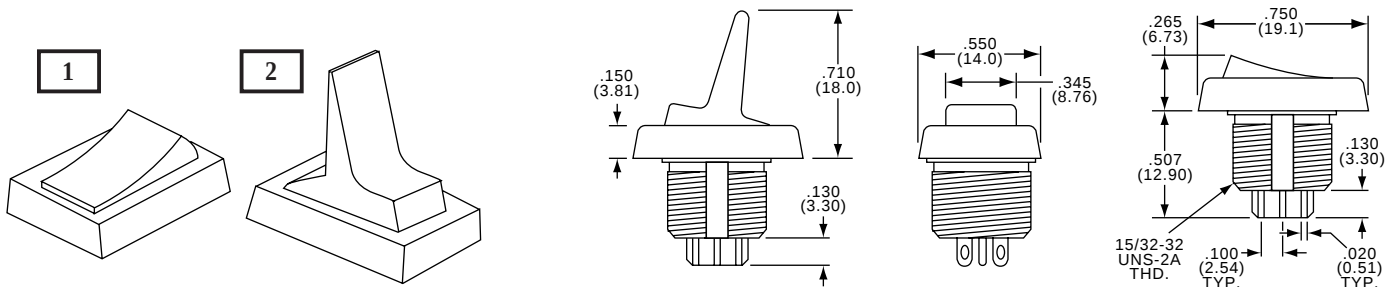
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HOW TO ORDER

See pages M2-M4 for application specific indexing.

Model	Contact Rating	Function	Actuator	Actuator Color	Terminal	Mount	L.E.D. Illumin.	L.E.D. Color	*UL
TRD1	Single Pole	Single Pole	1 Rocker	WL Wire Lug	15/32" round hole 1/2" square hole	L Beveled frame adaptor	None Option L		
TRD2		Double Pole	2 Paddle	WW Wire Wrap			2 red		
1 Gold 0.4VA 3 Silver 3A		D on-on	QC Quick Connect	4 yellow					
		E on-off-on	PC Printed Circuit	5 green					
		F on-(on)		25 bi-color red/green					
		G (on)-off-(on)							
		H on-off-(on)							
		Double Pole	0 black						
		2 red							
		6 blue							
9 yellow									
1 Gold 0.4VA 3 Silver 3A	Double Pole	N on-on						Functions: _____ Silver only D, F, N, & R	
	P on-off-on							Terminations _____ Functions only WL, WW or QC only	
	R on-(on)								
	S (on)-off-(on)								
	T on-off-(on)								

ACTUATORS

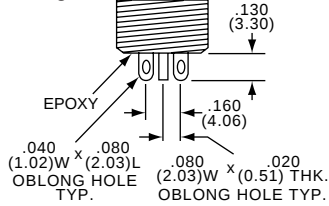


How To Order • Rocker/Paddle **TRD Series**

TERMINATIONS (Epoxy seal standard)

WL

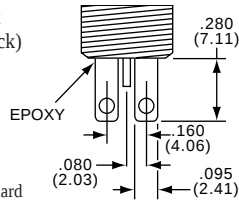
Wire Lug



QC

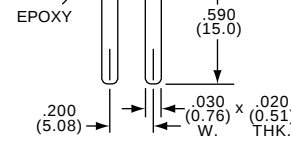
Quick Connect
.110" (.020 thick)

Mates with standard
.110" female connectors



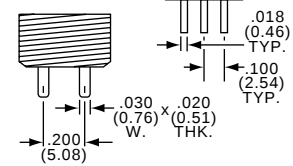
WW

Wire Wrap



PC

Printed Circuit

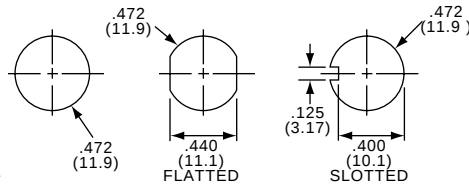


15/32" HOLE STANDARD

Standard TRD bushing will mount in any hole shown below.

Recommended panel thickness:
.030" to .250"

One hex nut, one internal tooth lock-washer supplied.

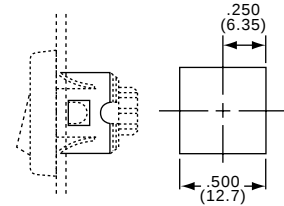


5

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



E

CONTACTS/RATING/UL RECOGNITION

1

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

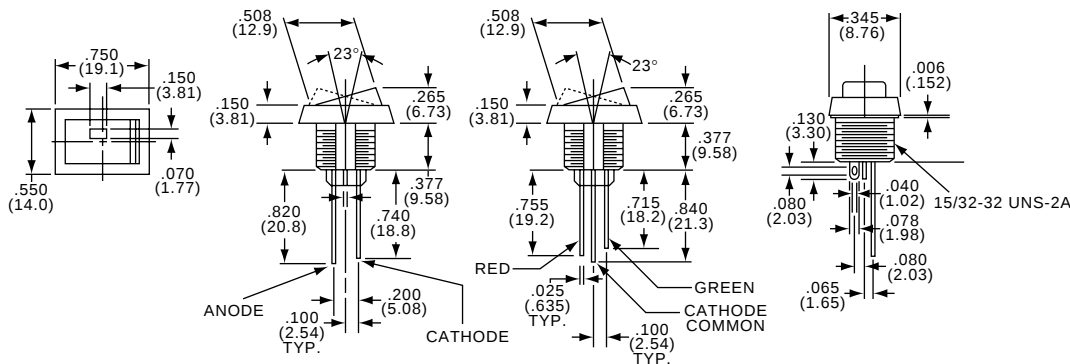
UL

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

LR

**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.

Need more technical information?

Consult your local Augat sales office
listed on the back cover

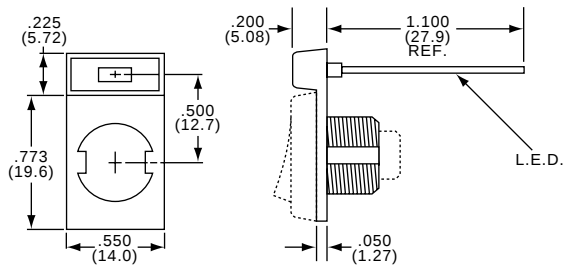
E5

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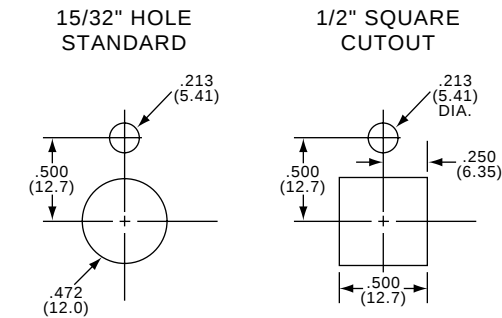
L

L.E.D. BEVELE FRAME ADAPTOR
(Accepts rectangular L.E.D.)



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

MOUNTING



Recommended Panel
Thickness: .030 to .220:

Recommended Panel
Thickness: .030 to .095"

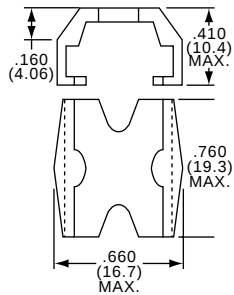
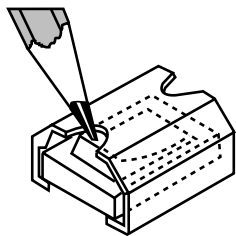
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FUNCTIONS

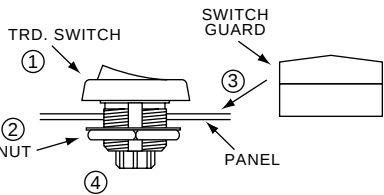
Single Pole	Double Pole			
		123 456	123 456	123 456
☐ D	☐ N	On	None	On
☐ E	☐ P	On	Off	On
☐ F	☐ R	On	None	(On)
☐ G	☐ S	(On)	Off	(On)
☐ H	☐ T	On	Off	(On)
SPDT Terminals Connected		2-3	---	1-2
DPDT Terminals Connected		2-3 5-6	---	1-2 4-5

None No mechanical position
Off Mechanical position, no electrical connection
(On) Momentary mechanical position, electrical connection

SWITCH GUARD



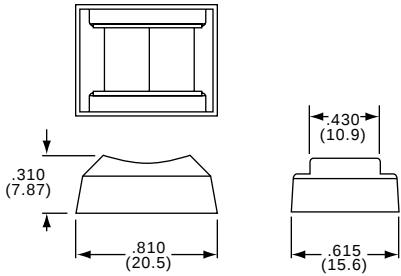
1. Insert switch in panel.
2. Attach lockwasher and hexnut.
3. Snap switch guard onto switch.
4. Tighten hex nut.



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

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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