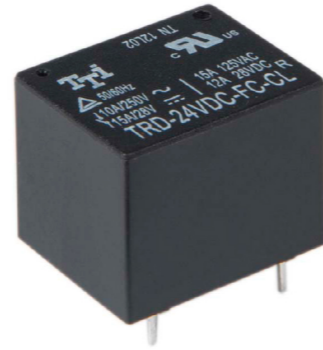


## MAIN FEATURES

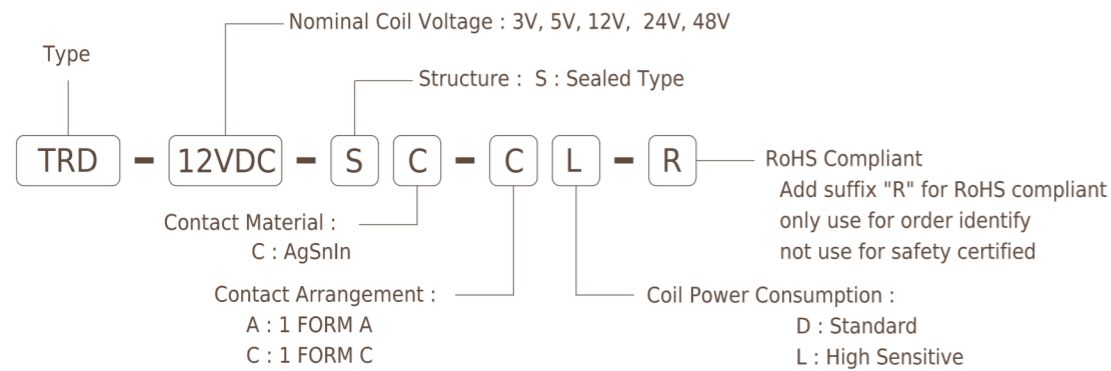
- Switching capacity available by 12A,15A in spite of small size design for high density P.C. board mounting technique.
- Selection of plastic material for high temperature and better chemical solution performance.
- Sealed types available.
- Simple relay magnetic circuit to meet low cost of mass production.
- UL and TUV recognized.



## APPLICATIONS

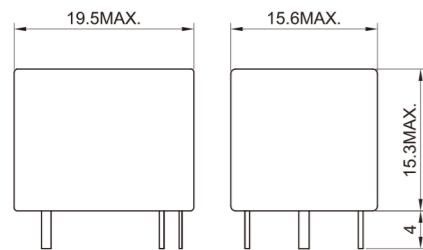
- Domestic appliance, office machine, audio, equipment, automobile, etc.

## ORDERING INFORMATION

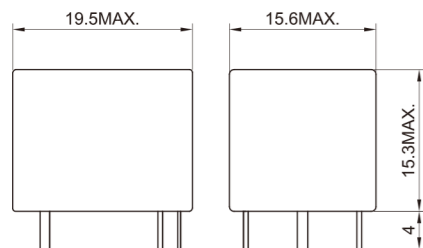


## DIMENSION(unit:mm)

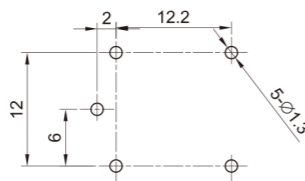
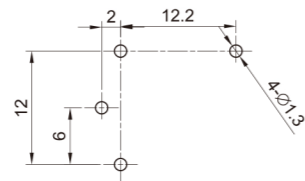
### 1 Form A



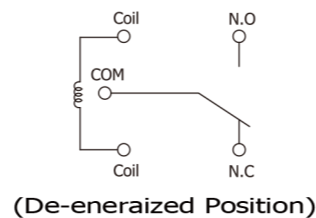
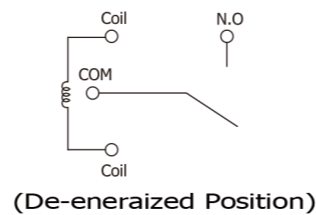
### 1 Form C



## DRILLING(unit:mm)



## WIRING DIAGRAM



## COIL DATA CHART(at 20°C )

Coil Sensitivity	Coil Voltage Code	Nominal Current (mA)	Coil Resistance ±10%(Ω)	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max-Allowable Voltage (VDC)
TRD (High Sensitivity)	3	120	25	abt. 0.36W	75% Max.	5% Min.	120%
	5	71.4	70				
	12	30	400				
	24	15	1600				
TRD (Standard)	48	7.5	6400	abt. 0.45W	75% Max.	5% Min.	110%
	3	150	20				
	5	89.3	55				
	12	37.5	320				
	24	18.7	1280	abt. 0.51W			
	48	10	4500				

## CONTACT RATING

Item	TRD	
	12A	15A
Contact Capacity Resistive Load (cosΦ=1)	12A 28VDC (UL ) 12A 120VAC 12A 28VDC (TUV) 6A 250VAC	12A 28VDC (UL ) 15A 125VAC 15A 28VDC (TUV)10A 250VAC
Rated Carrying Current	12A	15A
Max. Allowable Voltage	250VAC / 110VDC	250VAC / 110VDC
Max. Allowable Current	12A	15A
Max. Allowable Power Force	125VA/60W	125VA/60W
Referenced Min. Applicable Load	5VDC/10mA	5VDC/10mA
Contact Material	Silver Alloy	

## PERFORMANCE(at initial value)

Item	TRD
Contact Resistance	100mΩ Max.
Operation Time	10msec Max.
Release Time	5msec Max.
Dielectric Strength Between coil & contact Between contacts	1500VAC 50/60Hz (1 minute) 750VAC 50/60Hz (1 minute)
Surge Resistiveness	3000V (between coil & contact 1x40u sec)
Insulation Resistance	100 MΩ Min. (at 500VDC)
Max. ON/OFF Switching Mechanically Electrically	300 operation/min 30 operation/min
Operating Ambient Temperature	-30°C to +80°C (No water condensation and no water drop)
Operating Humidity	45% to 85% RH
Coil Temperature Rise	35 deg. Max.
Vibration Endurance Error Operation	10 to 55Hz Double Amplitude 1.5mm 10 to 55Hz Double Amplitude 1.5mm
Shock Endurance Error Operation	980m/s <sup>2</sup> . 98m/s <sup>2</sup> .
Life Expectancy Mechanically Electrically	1 x 10 <sup>7</sup> operations. Min. (no load) 1 x 10 <sup>5</sup> operations. Min. (at rated coil voltage)
Weight	abt. 10g.
UL	E156521
TUV	R 50062544

1.Tolerance ±0.5mm on all dimensions unless otherwise stated.  
2. Tolerance ±0.1mm on PCB DRILLING dimension unless otherwise stated.