

● Features

- 3A switching capability
- 1 Form C configuration
- Standard PCB layout
- Plastic sealed and flux proofed types available
- Environmental friendly product (RoHS compliant)
- Dimensions: 15.5 x 10.5 x 11.7 mm



● Application

- Communication Equipment / Program Control Exchanges / Instruments Meters / Monitoring Equipment / Home Security System / Network Device / Walkie Talkie, etc.

● Contact Data

Contact Arrangement	1C		
Contact Material	Ag Alloy + Au		
Contact Rating	1A 250VAC, 1A 30VDC	3A 250VAC, 3A 30VDC	5A 125VAC, 5A 30VDC
Max. Switching Power	250VA / 30W	750VA / 90W	625VA / 150W
Max. Switching Voltage	250VAC	250VAC	125VAC
Max. Switching Current	1A	3A	5A
Contact Resistance	$\leq 50\text{m}\Omega$		
Electrical Endurance	1×10^5		
Mechanical Endurance	1×10^7		

- Coil Parameter

0.2W Type

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
3	3.9	45	2.25	0.3	0.2
5	6.5	125	3.75	0.5	
6	7.8	180	4.50	0.6	
9	11.7	405	6.75	0.9	
12	15.6	720	9.00	1.2	
24	31.2	2880	18.0	2.4	

0.36W Type

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
3	3.9	25	2.25	0.3	0.36
5	6.5	70	3.75	0.5	
6	7.8	100	4.50	0.6	
9	11.7	223	6.75	0.9	
12	15.6	400	9.00	1.2	
24	31.2	1600	18.0	2.4	

0.45W Type

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
3	3.9	20	2.25	0.3	0.45
5	6.5	55	3.75	0.5	

● Coil Parameter

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
6	7.8	80	4.50	0.6	0.45
9	11.7	180	6.75	0.9	
12	15.6	320	9.00	1.2	
24	31.2	1280	18.0	2.4	

● Operation Condition

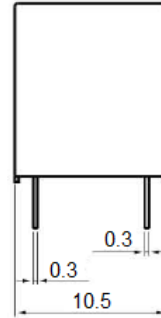
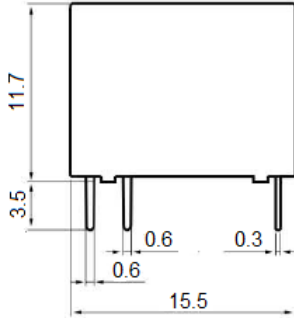
Insulation Resistance		100M Ω min (at 500VDC)
Dielectric Strength	Between Contacts	750V
	Between Contact and Coil	TB type: 1000V, TBS type: 1500V
Shock Resistance	Functional	98m/s ²
	Endurance	980m/s ²
Vibration Resistance		10~55Hz double amplitude 1.5mm
Ambient Temperature		-25 ~ +70°C
Operate Time		≤ 5 ms
Release Time		≤ 5 ms
Relative Humidity		5%~85%
Weight		Approx. 4g

● Ordering Information

		TB	-12D	20	-5	-S	(XXX)
Model	TB: 6 Pin	TBS: 5 Pin					
Coil Voltage	3, 5, 6, 9, 12, 24 VDC						
Coil Power	20: 200mW	36: 360mW	45: 450mW				
Contact Capacity	Nil: 3A	5: 5A					
Construction	Nil: Flux tight	S: Sealed					
Special Code	Nil: Standard	XXX: Customer special requirement					

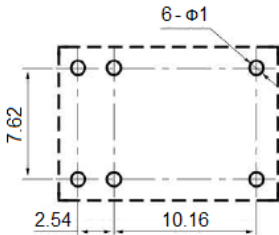
● Dimensions (UNIT: mm)

Outline Dimensions

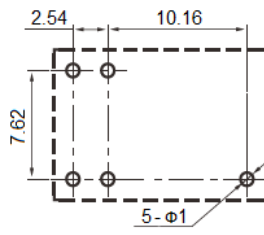


Mounting (Bottom views)

TB type

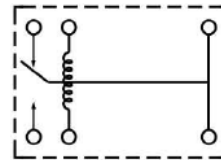


TBS type

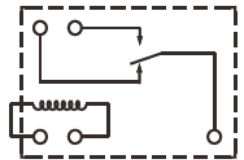


Wiring Diagram (Bottom views)

TB type

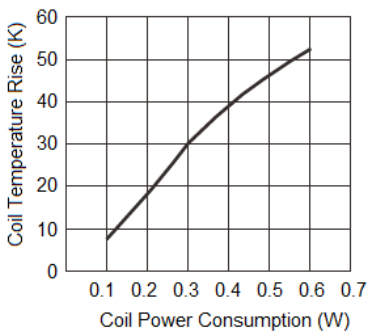


TBS type

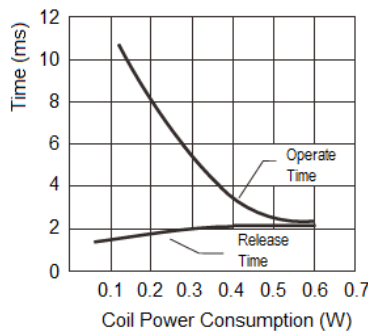


● Engineering Data

Coil Temperature Rise



Action Time



Endurance Curve

