



TR99

MAIN FEATURES

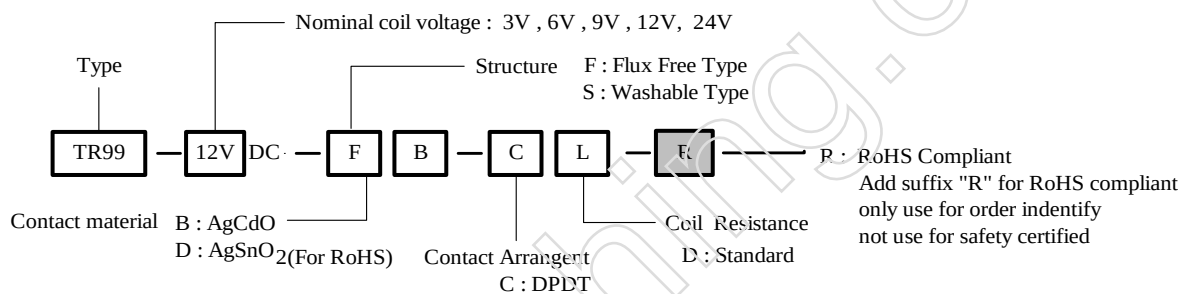
- Small size and sensitive operation.
- Low coil power consumption.
- PCB mounting.
- Switching capacity from 1A to 5A.
- Sealed type available.

APPLICATIONS

- Audio equipment.
- Communication equipment.
- Remote control.
- Acoustic controlled toys.



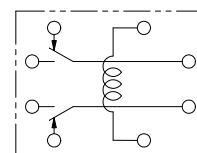
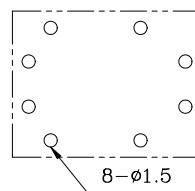
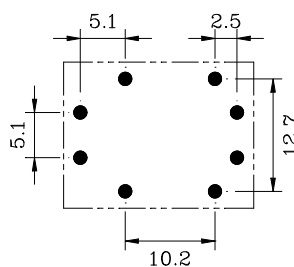
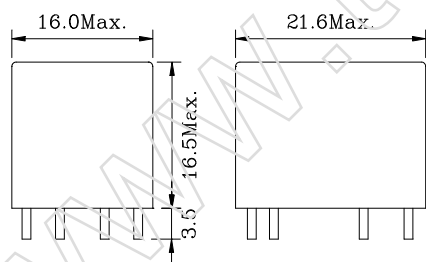
ORDERING INFORMATION



DIMENSION (unit:mm)

DRILLING (unit:mm)

WIRING DIAGRAM



COIL DATA CHART (AT20°C)

Coil Sensitivity	Coil Voltage Code	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω) $\pm 10\%$	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max-Allowable Voltage (VDC)
TR99 (Standard)	03	3	150	20	abt. 0.45W	75% Max.	10% Min.	110%
	06	6	75	80				
	09	9	50	180				
	12	12	37.5	320				
	24	24	18.7	1280				

CONTACT RATING

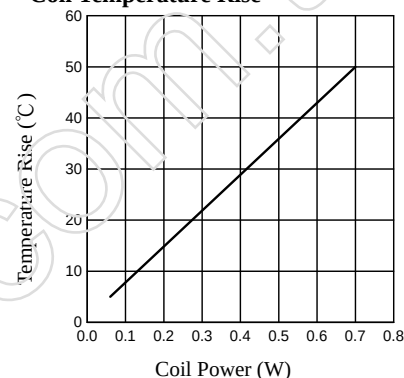
Item \ Type	TR99
Contact Capacity	
Resistive Load ($\cos\Phi=1$)	5A 277VAC 5A 28VDC
Inductive Load ($\cos\Phi=0.4$ L/R=7msec)	2A 110VAC 2A 28VDC
Rated Carrying Current	5A
Max. Allowable Voltage	110VAC 28VDC
Max. Allowable Current	5A
Max. Allowable Power Force	550VA 140W
Referenced Min. Applicable Load	5VDC 110mA
Contact Material	Ag Alloy

PERFORMANCE (at initial value)

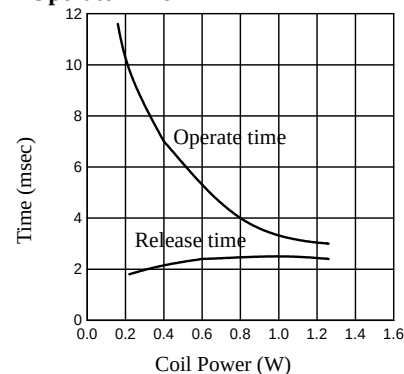
Item \ Type	TR99
Contact Resistance	100m Ω Max.
Operation Time	15msec Max.
Release Time	5msec Max.
Dielectric Strength	
Between coil & contact	1000VAC 50/60HZ (1 minute)
Between contacts	750VAC 50/60HZ (1 minute)
Surge Resistiveness	1500V (between coil & contact 1 $\times$ 40 usec)
Insulation Resistance	100 M Ω Min. (500VDC)
Max. ON/OFF Switching	
Mechanically	300 operation/min
Electrically	30 operation/min
Operating Ambient Temperature	-30°C to +60°C (No water condensation and no water drop)
Operating Humidity	45% to 85%RH
Coil Temperature Rise	35 deg. Max. (at rated coil voltage)
Vibration	
Endurance	10 to 55Hz Double Amplitude 1.5mm
Error Operation	10 to 55Hz Double Amplitude 1.5mm
Shock	
Endurance	100G Min.
Error Operation	10G Min.
Life Expectancy	
Mechanically	10 $\times$ 10 ⁶ ops. Min. (no load)
Electrically	10 $\times$ 10 ⁴ ops. Min. (at rated coil voltage)
Weight	abt. 12grs.

REFERENCE DATA

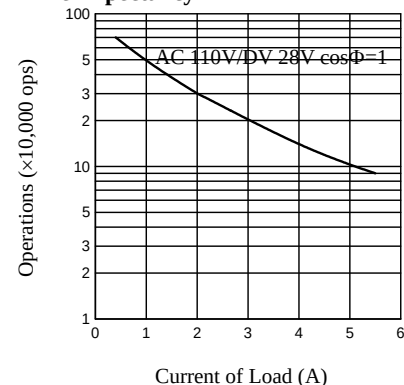
Coil Temperature Rise



Operate Time



Life Expectancy



This datasheet for reference and subject to change without notice. Please double check final specification with Tai-Shing.