

Miniature Power Relay



Features

- High contact capability: 12A switching capability..
- Low coil power consumption, low price.
- Microminiature relay, standard PCB terminal.

Safety Approval

UL, TUV, CQC

Contact Capacity

Model	M3F
Nominal Switching Capacity	10A 250VAC 15A 125VAC
Max. switching current	15A
Max. switching voltage	250VAC
Max. switching power	2,500VA

Characteristic Data

Contact Material	Silver alloy	
Initial contact resistance	50mΩ Max.	
Operate time (at nominal volt.)	8msec. Max.	
Release time(at nominal volt.)	5msec. Max.	
Initial insulation resistance	100MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts:	AC 750V, 50/60Hz 1Min.
	Between coil and contact:	AC, 1500V, 50/60Hz 1Min.
Vibration resistance	Functional	10~55Hz at double amplitude of 1.5 mm
	Destructive	10~55Hz at double amplitude of 1.5 mm
Shock resistance	Functional	10G Min.
	Destructive	100G Min.
Endurance (operations)	Mechanical (at 10,800 ops./h)	10,000,000
	Electrical (at 10,800 ops./h)	100 000
Ambient temperature	-40℃ ~ +105℃ (no condensation)	
Unit weight	Approx. 10.0g	

Coil Data (at 20℃)

Nominal voltage (VDC)	Nominal operating current ± 10% (mA)	Coil resistance ± 10% (Ω)	Max. Allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
3	120.00	25	130% of nominal voltage	75% of nominal voltage	5% of nominal voltage	0.36W
5	71.42	70				
6	60.00	100				
9	40.00	225				
12	30.00	400				
15	24.00	625				
18	20.00	900				
24	15.00	1,600				
48	7.50	6,400				
60	6.00	10,000				

Safety Approval Ratings

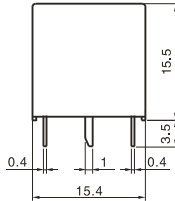
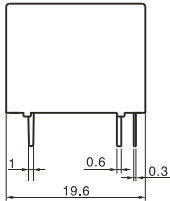
Approval	CQC	TUV	UL
Approval ratings	NO: 15A 125VAC 10A 250VAC 28VDC	10A 250VAC	NO: 15A 125VAC TV-5 120VAC 10A 250VAC

Ordering Information

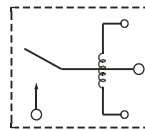
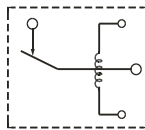
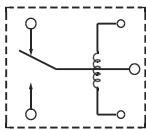
Nomenclature

M3F-SS-1 12 D M 1 - F-XX	Special Parameter: Nil-Standard type Letter or number- Special requirement
	Insulation System: Nil-Standard, B-Class B, F-Class F
	Contact Material: Nil-AgSnO ₂ , 1-AgCdO
	Contact Form: M-Form A B-Form B Nil-Form C
	Coil Power: D-0.36W
	Coil Voltage: 03, 05, 06, 09, 12, 24, 48
	Number of Poles: 1-1 Pole
	Protective Construction: SS-Plastic Sealed SH-Sealed type washable
	Type Designation: M3F

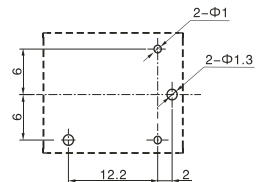
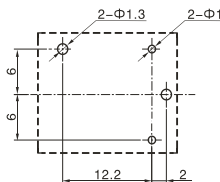
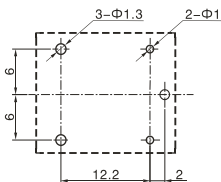
Outline Dimensions, Wiring Diagram, P. C. Board Layout(unit:mm)



Unless otherwise specified:
 <1mm, tolerance: ± 0.2 mm;
 1~5mm, tolerance: ± 0.3 mm;
 >5mm, tolerance: ± 0.4 mm;
 Note: 1. Extended terminal dimension
 is dimension before soldering.
 2.Tolerance of P. C. B. layout: ± 0.1 mm



Wiring Diagram(bottom view)



1c

1b

1a

P. C. B. Layout(bottom view)

Typical Applications

- Home appliances such as air conditioner, heater, etc.
- Automat ● Office equipment such as computer, fax machine, etc.
- Automatic electric controlled window, automotive antenna, door lock, etc.

Characteristic Curves

