



M 4 S

RU E158859

20.0×9.8×12.0

Features

- DIL Pitch Terminals .High Sensitivity .
- Conforms to FCC Part 68 1.5kV Surge and Dielectric 1000VAC .
- Fully sealed (immersion cleaning).
- High Reliability bifurcated Contact.
- Application for Telecommunication Equipment、 Office Equipment、 Security Alarm Systems、 Measuring instruments、 Medical Monitoring Equipment、 Audio Visual Equipment、 Flight Simulator、 Sensor Control .

Ordering Information

M4S 12 H A W
1 2 3 4 5

- 1 Part Number: M4
- 2 Coil Rated Voltage: DC:3:3V; 5:5V; 6:6V; 9:9V; 12:12V; 18:18V; 24:24V; 48:48V
- 3 Enclosure: H: Sealed Type
- 4 Nominal Coil Power: Nil:0.15W; A:0.2W;
- 5 Contact Material: Nil: Ag·Ru; W: Ag·Ni

Contact Data

Contact Arrangement	2C (DPDT(B-M)) (Bifurcated Crossbar)	
Contact Material	Ag·Ru(Gold clad) Ag·Ni(Gold clad)	
Contact Rating (resistive)	2A/30VDC; 0.6A/125VAC	
Max. Switching Power	60W 125VA	Min. Switching load: 0.01mA/10mV (Reference Value)
Max. Switching Voltage	220VDC 250VAC	Max. Switching Current:2A
Contact Resistance	or ≤100mΩ	Item 3.12 of IEC255-7
Voltage drop		
Operation life	Electrical 3 × 10 ⁵ (AgNi : 1 × 10 ⁵)	Item 3.30 of IEC255-7
	Mechanical 10 ⁸	Item 3.31 of IEC255-7

CAUTION:

Relays previously tested or used above 10mA resistive at 6VDC maximum or peak AC open circuit are not recommended for subsequent use in low level applications.

Coil Parameter

Dash Numbers	Coil voltage VDC		Coil resistance Ω±10%	Pick up voltage VDC(max) (70% or 66%of rated voltage)	release voltage VDC(min) (5% or 10% of rated voltage)	Coil power W	Operate Time ms	Release Time ms
	Rated	Max.						
M4S-003	3	7.5	60	2.1	0.15	0.15		
M4S-005	5	12.5	167	3.5	0.25	0.15		
M4S-006	6	15.0	240	4.2	0.3	0.15		
M4S-009	9	22.5	540	6.3	0.45	0.15		
M4S-012	12	30.0	960	8.4	0.6	0.15	≤5	≤3
M4S-018	18	40.0	1620	12.6	0.9	0.20		
M4S-024	24	52.9	2880	16.8	1.2	0.20		
M4S-048	48	84.9	7680	33.6	2.4	0.30		
M4S-003A	3	6.5	45	2.1	0.3	0.2		
M4S-005A	5	10.8	125	3.5	0.5	0.2		
M4S-006A	6	13.0	180	4.2	0.6	0.2		
M4S-009A	9	19.5	405	6.3	0.9	0.2	≤5	≤3
M4S-012A	12	26.5	720	8.4	1.2	0.2		
M4S-024A	24	52.9	2880	16.8	2.4	0.2		
M4S-048A	48	103.9	11520	33.6	4.8	0.2		

Characteristics

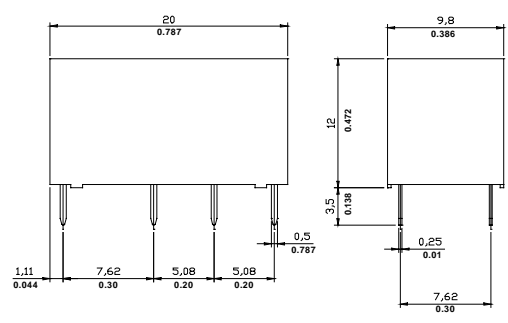
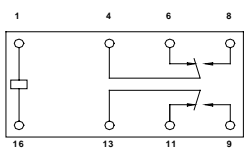
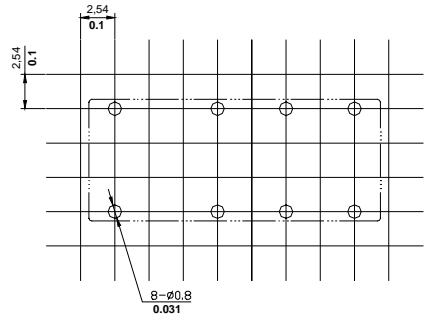
Electrostatic capacitance			
Between open Contacts	Approx.0.7pF	Item 3.41	of IEC255-7
Between coil & Contacts	Approx.1.0pF	Item 3.41	of IEC255-7
Between Contact Poles	Approx.0.9pF	Item 3.41	of IEC255-7
Insulation Resistance	1000M Ω min (at 500VDC)	Item 7	of IEC255-5
Dielectric Strength			
Between open Contacts	1000VAC 1min	Item 6	of IEC255-5
Between coil & Contacts	1000VAC 1min	Item 6	of IEC255-5
Between Contact Poles	1000VAC 1min	Item 6	of IEC255-5
Surge Withstand Voltage			
Between open Contacts	1500V	FCC68	
Between coil & Contacts	1500V	FCC68	
Between Contact Poles	1500V	FCC68	
Shock resistance	Functional:100m/s ² 11ms; Survival:1000 m/s ² 6ms	IEC68-2-27	Test Ea
Vibration resistance	10~55Hz Double amplitude Functional: 1.5mm Survival:5mm	IEC68-2-6	Test Fc
Terminals strength	5N	IEC68-2-21	Test Ua1
Solderability	235 $^{\circ}$ C \pm 2 $^{\circ}$ C 3 \pm 0.5s	IEC68-2-20	Test Ta method 1
Temperature Range	-40~90 $^{\circ}$ C (-40~194 $^{\circ}$ F) (-40~80 $^{\circ}$ C for 0.3W Coil)		
Mass	4.5g		

Qualification inspection:

Perform the qualification test as specified in the table IV of IEC255-19-1 and minimum sample size24.

Safety approvals

Safety approval	UL&CUR
Load	2A/24VDC 0.6A/125VAC

Dimensions	mm/inch
 <p style="text-align: center;">Dimensions</p>	 <p style="text-align: center;">Wiring diagram (Bottom views)</p>
 <p style="text-align: center;">Tolerance: \pm0.1/\pm0.004 Mounting (Bottom views)</p>	
<p>NOTES 1).Dimensions are in millimeter. 2).Inch equivalents are given for general information only.</p>	