



INDUSTRIAL RELAYS

UL & CUL File #E256619

FEATURES

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

TYPICAL APPLICATIONS

Home Appliances, Air Conditioner, Heater, Office Equipment, Computer, FAX Machine, Automotive: Window Control, Antenna, Door Lock.

ORDERING INFORMATION

RD -S -1 12 D M 1 -F -XX
(1) (2) (3) (4) (5) (6) (7) (8) (9)

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|--|---|
| <p>(1) Type Designation
RD = RD Series</p> <p>(2) Protective Construction
S = Flux proofed
SH = Sealed type washable</p> <p>(3) Number of Poles
1 = 1 pole</p> <p>(4) Coil Voltage (VDC)
03, 05, 06, 09, 12, 15, 18, 24, 48, 60</p> <p>(5) Coil Power
D = 0.36W</p> <p>(6) Contact Form
Nil = Form C
B = Form B
M = Form A</p> | <p>(7) Contact Material
Moveable Contact
Nil = AgSnO₂, φ 2.8
1 = AgCdO, φ 2.8
2 = AgSnO₂, φ 3.0
3 = AgCdO, φ 3.0
4 = 3 Compounds, φ 3.0
5 = Cu plated with La, φ 3.0</p> <p>Stationary Contact
Nil = AgSnO₂, φ 3.0
1 = AgCdO, φ 3.0
2 = AgSnO₂, φ 3.0
3 = AgCdO, φ 3.0
4 = 3 Compounds, φ 3.0
5 = Cu plated with La, φ 3.0</p> <p>(8) Insulation System
Nil = Standard
B = Class B ⁽¹⁾
F = Class F ⁽²⁾</p> <p>(9) Special Parameter
Nil = Standard type
Letter or Number = Special Requirement</p> |
|--|---|

φ = diameter of contact.

Note 1: Heat resistivity = -40°C to +130°C.

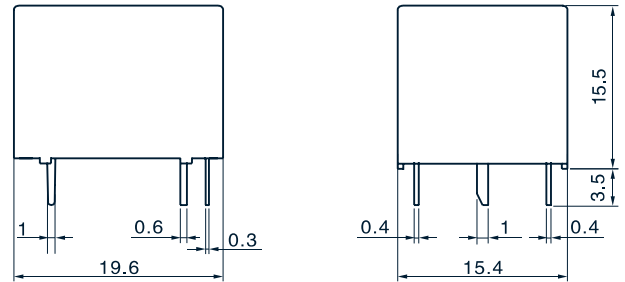
Note 2: Heat resistivity = -40°C to +155°C.

COIL DATA (AT 20°C)

Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ± 10% (Ω)	Max. Allowable Voltage	Pick-up Voltage (Max.)	Drop-Out Voltage (VDC)	Nominal Operating Power
3	120.00	25	130% of Nominal Voltage	75% of Nominal Voltage	5% of Nominal Voltage	Approx. 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	1600				
48	7.50	6400				
60	6.00	10000				

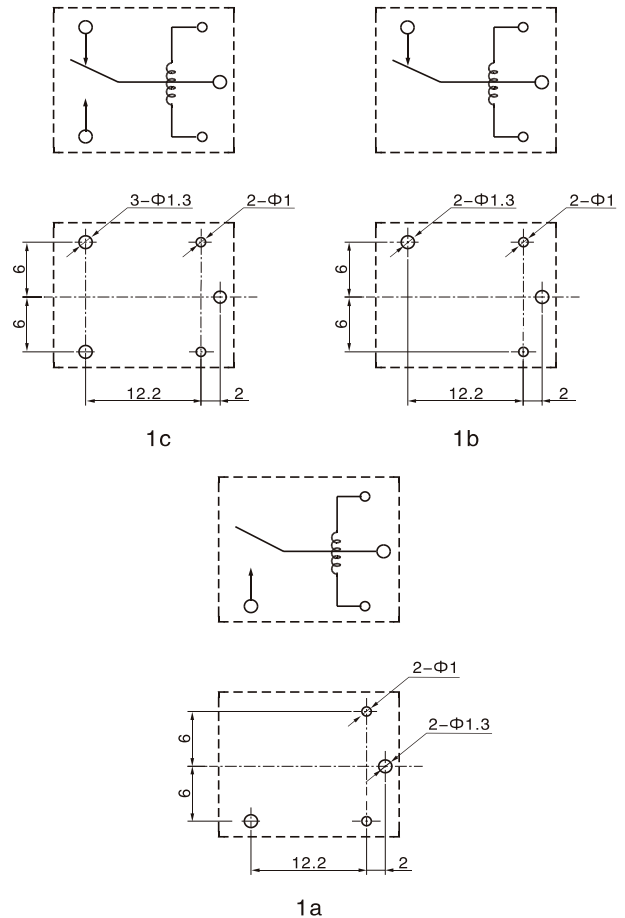
DIMENSIONS

Unit: mm



WIRING DIAGRAM & PCB BOARD LAYOUT

Bottom view. Unit = mm



Unless otherwise specified:

If dimension <1mm tolerance: ±0.2mm;

If dimension 1-5 mm tolerance: ±0.3mm

If dimension >5mm tolerance: ±0.4mm

Note 1. Extended terminal dimension is dimension before soldering.

Note 2. Tolerance of P.C.B. layout is: ±0.1mm.





CHARACTERISTIC DATA

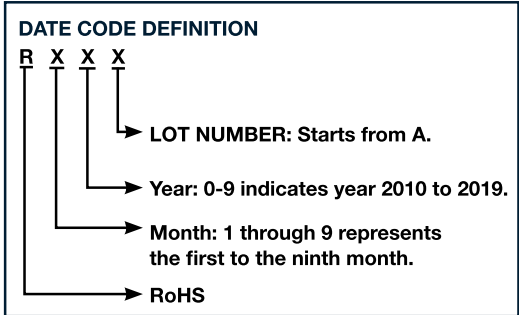
Contact Material	Silver Alloy	
Initial contact resistance (@ 6VDC 1A)	50mΩ Max.	
Operate time (@ nominal voltage)	8msec. Max.	
Release Time (@ nominal voltage)	5msec. Max.	
Initial insulation resistance	100M Ω Min. (DC500V)	
Initial dielectric strength	Between open contacts: AC750V, 50/60Hz 1Min.	
	Between coil and contact: AC1500V, 50/60Hz 1Min.	
Vibration Resistance	Functional	10 ~ 55Hz @ double amplitude of 1.5mm
	Destructive	10 ~ 55Hz @ double amplitude of 1.5mm
Shock Resistance	Functional	10G Min.
	Destructive	100G Min.
Endurance (operations)	Mechanical (@10,800 ops./h)	10,000,000
	Electrical (@1,800 ops./h)	7A 250VAC: 100,000 10A 250VAC: 50,000
Ambient Temperature	-40°C to +105°C (no condensation)	
Unit Weight	Approximately 8.5g	

CONTACT CAPACITY

Model	Nominal Switching Capacity (res. load)	Max. Switching Current	Max. Switching Voltage	Max. Switching Power
RD-DM	10A 250VAC	15A	250VAC	2500VA
RD-D & RD-DB	7A 250VAC	12A	250VAC	1750VA

SAFETY APPROVAL RATINGS

UL/CUL
E256619
12A 125VAC, Resistive
15A 125VAC, Resistive (Form A only)
10A 250VAC, Resistive (Form A only)
10A/6A 250VAC, General Use, N.O./N.C.
10A/6A 125VAC, General Use, N.O./N.C.
10A/6A 28VDC, General Use, N.O./N.C.
7A 250VAC, General Use
3A 125VAC, General Use
1/3 HP 250VAC
Pilot Duty: 240VA, 240 VAC
TV-5, 120VAC, N.O.



CHARACTERISTIC CURVES

