

INDUSTRIAL RELAYS

UL & CUL File #E256619

TUV File #R 50227685

FEATURES

- Small size (18.4 x 10.2 x 15.5mm) with 5A switching capability for high density PCB Mounting.
- Surge voltage: 5000V (between coil and contact).

TYPICAL APPLICATIONS

Home Appliances, Office Equipment, Audio Equipment, Car, Air Conditioner, etc.

ORDERING INFORMATION

RZ -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
RZ = RZ 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, 18, 24</p> <p>(5) Coil Power
D = 0.45W
L = 0.20W</p> | <p>(6) Contact Form
M = Form A</p> <p>(7) Contact Material
Nil = AgSnO₂
1 = AgCdO</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> |
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Note 1: Heat resistivity = -40°C to +130°C.

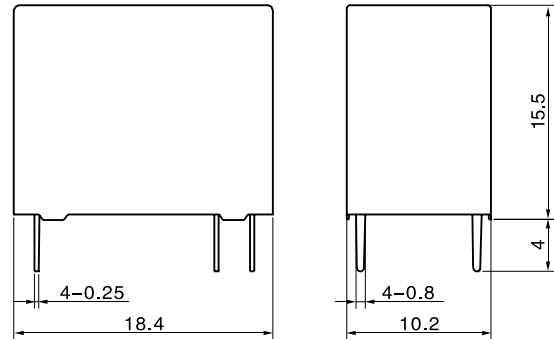
Note 2: Heat resistivity = -40°C to +155°C.

SAFETY APPROVAL RATINGS

Approval	TUV	UL/CUL	
File Number	R50182350	E256619	
RZ	10A 250VAC	RZ-D	RZ-L
		10A 125VAC: Resistive 5A 277VAC: Resistive 10A 120VAC: Resistive 5A 250VAC: Resistive 5A 28VDC: Resistive 5A 250VAC: General Use 1.5A 250VAC: General Use 1/3HP 240VAC TV-5: 120VAC Pilot Duty: 240VA, 240VAC	3A 277VAC: Resistive 5A 120VAC: Resistive 3A 250VAC: Resistive 3A 28VDC: Resistive 3A 250VAC: General Use 1A 250VAC: General Use 1/4HP 240VAC TV-3: 120VAC Pilot Duty: 120VA, 240VAC

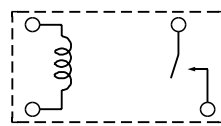
DIMENSIONS

Unit: mm



SCHEMATICS

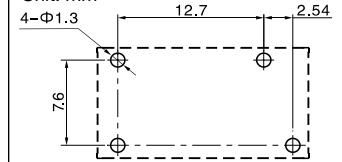
Bottom view



PCB LAYOUT

Bottom view

Unit: mm



Unless otherwise specified:

If dimension < 1mm, tolerance: ±0.2mm;

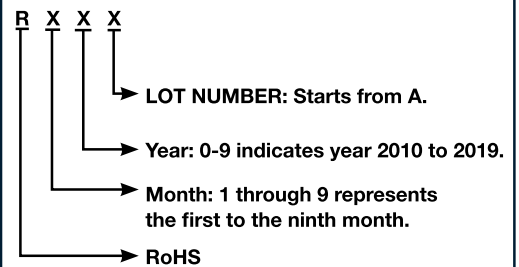
If dimension 1~5mm, tolerance: ±0.3mm;

If dimension > 5mm, tolerance: ±0.4mm.

Note: 1. Extended terminal dimension is dimension before soldering.

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

DATE CODE DEFINITION



CHARACTERISTIC DATA

Contact Material	Silver Alloy	
Initial contact resistance (@ 6VDC 1A)	50mΩ Max.	
Operate time (@ nominal voltage)	10msec. Max.	
Release Time (@ nominal voltage)	5msec. Max.	
Initial insulation resistance	1000M Ω Min. (DC500V)	
Initial dielectric strength	Between open contacts: AC1000V, 50/60Hz 1 Min.	
	Between coil and contact: AC4000V, 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)	100,000
Ambient Temperature	-40°C to +105°C (no condensation)	
Unit Weight	Approximately 5.g	

CONTACT CAPACITY

Model	Nominal Switching Capacity (res. load)	Max. Switching Current	Max. Switching Voltage	Max. Switching Power
RZ-DM	5A 250VAC	5A	277VAC	1250VA
RZ-LM	3A 250VAC	3A	277VAC	750VA

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	150.00	20	130% of Nominal Voltage	75% of Nominal Voltage	5% of Nominal Voltage	Approx. 0.45W
5	90.00	55				
6	75.00	80				
9	50.00	180				
12	37.50	320				
18	25.00	720				
24	18.75	1280				

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	66.67	45	130% of Nominal Voltage	75% of Nominal Voltage	5% of Nominal Voltage	Approx. 0.20W
5	40.00	125				
6	33.33	180				
9	22.22	405				
12	16.67	720				
18	14.81	1620				
24	8.33	2880				

CHARACTERISTIC CURVES

