2. Specifications

Characteristics	Item		Specifications
Contact	Arrangement		1 Form A 1 Form B, 2 Form A
	Contact material		Au-flashed $AgSnO_2$ type
	Initial contact resistance, max.		Max. 30 mΩ (By voltage drop 6 V DC 1A)
Rating	Max. switching power (resistive load)		3,040 VA, 150 W
	Max. switching voltage		380 V AC, 250 V DC
	Max. switching current		8 A
	Minimum operating power		150mW (Single side stable, 2 coil latching)
	Nominal operating power		240mW (Single side stable, 2 coil latching)
	Min. switching capacity (Reference value)*1		100 mA 5V DC
Electrical characteristics	Insulation resistance (Initial) (at 25°C, 50% relative humidity)		Min. 1,000MΩ (at 500V DC) Measurement at same location as “Initial breakdown voltage” section.
	Breakdown voltage (Initial)	Between open contacts	1,200 Vrms for 1 min. (Detection current: 10 mA)
		Between contact sets	2,000 Vrms for 1 min. (Detection current: 10 mA)
		Between contact and coil	3,750 Vrms for 1 min. (Detection current: 10 mA)
	Surge breakdown voltage (Initial)*2		6,000 V (Between contact and coil)
	Operate time [Set time] (at 20°C 68°F)		Max. 15 ms [Max. 15 ms] (Nominal voltage applied to the coil, excluding contact bounce time.)
	Release time [Reset time] (at 20°C 68°F)		Max. 10 ms [Max. 15 ms] (Nominal voltage applied to the coil, excluding contact bounce time.) (without diode)
	Temperature rise (at 60°C 140°F)		Max. 55°C (By resistive method, nominal voltage applied to the coil; contact carrying current: 8A.)
Mechanical characteristics	Shock resistance	Functional	Min. 196 m/s^2 (Half-wave pulse of sine wave: 11 ms; detection time: 10μs.)
		Destructive	Min. 980 m/s^2 (Half-wave pulse of sine wave: 6 ms.)
	Vibration resistance	Functional	10 to 55 Hz at double amplitude of 2 mm (Detection time: 10μs.)
		Destructive	10 to 55 Hz at double amplitude of 3 mm
Expected life	Mechanical		Min. 10^7 (at 180 times/min.)
	Electrical		Min. 10^5 (8 A 250 V AC resistive) (ON : OFF = 1 s : 5 s)
Conditions	Conditions for operation, transport and storage*3		Ambient temperature: –40°C to +60°C –40°F to +140°F; Humidity: 5 to 85% R.H. (Not freezing and condensing at low temperature)
	Max. operating speed		20 times/min.*4
Unit weight			Approx. 10g .353 oz

*1 This value can change due to the switching frequency, environmental conditions, and desired reliability level, therefore it is recommended to check this with the actual load.

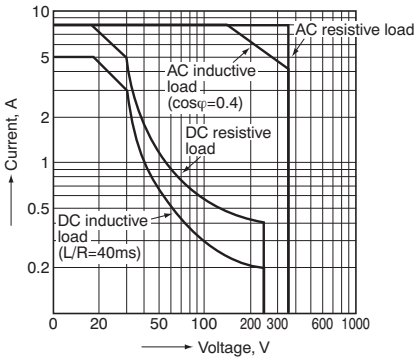
*2 Wave is standard shock voltage of ±1.2×50μs according to JEC-212-1981.

*3 Refer to “6. Usage, Storage and Transport Conditions“ in AMBIENT ENVIRONMENT section in Relay Technical Information.

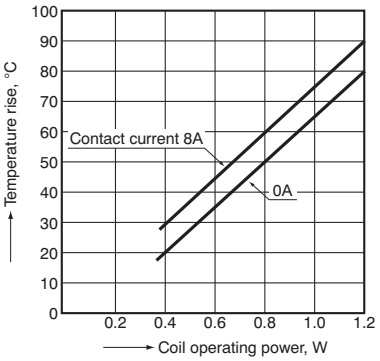
*4 The max. operating speed amounts to 30cps without load.

REFERENCE DATA

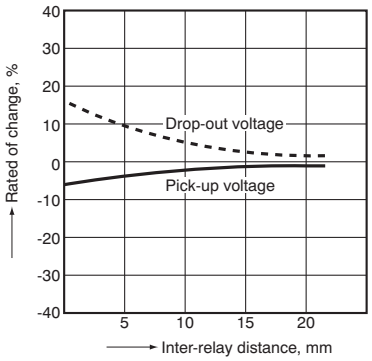
1. Max. switching power



2. Coil temperature rise



3. Influence of adjacent mounting

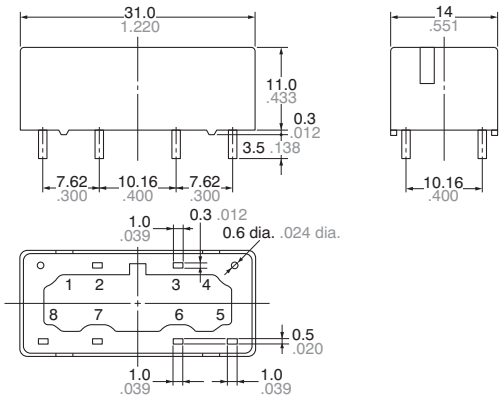


DIMENSIONS(mm inch)

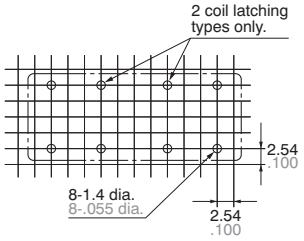
Download CAD Data from our Web site.

CAD Data

External dimensions



PC board pattern (Bottom view)



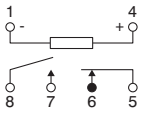
Tolerance: ±0.1 ±.004

General tolerance: ±0.5 ±.020

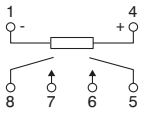
Schematic (Bottom view)

Single side stable / 1 coil latching

1 Form A 1 Form B



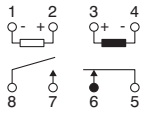
2 Form A



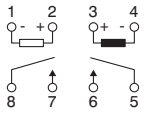
(Deenergized condition)

2 coil latching

1 Form A 1 Form B



2 Form A



(Reset condition)

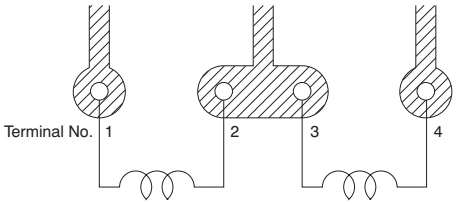
SAFETY STANDARDS

UL/C-UL (Recognized)		CSA (Certified)		VDE (Certified)		TV rating (UL/CSA)	
File No.	Contact rating	File No.	Contact rating	File No.	Contact rating	File No.	Rating
E43028	8A 250V AC 1/4HP 125, 250V AC 5A 30V DC	LR26550 etc.	8A 250V AC 1/4HP 125, 250V AC 5A 30V DC	1017	8A 250V AC (cosφ=1.0) 4A 250V AC (cosφ=0.4) 5A 30V DC	UL: E43028 CSA: LR26550	—

NOTES

1. PC board patterns for 2 coil latching types

When applying relays in power supply operation circuits for finished products regulated by the Electrical Appliance and Material Safety Law, use the pattern shown below.



2. Soldering should be done under the following conditions:

1)
250°C 482°F within 10s
300°C 572°F within 5s
350°C 662°F within 3s

2) For automatic cleaning, the boiling method is recommended. Avoid ultrasonic cleaning which subjects the relays to high frequency vibrations, which may cause the contacts to stick.
It is recommended that a fluorinated hydrocarbon or other alcoholic solvents be used.

3. When using, please be aware that the a contact and b contact sides of 1 Form A and 1 Form B types may go on simultaneously at operate time and release time.

For Cautions for Use, see Relay Technical Information.