

971 Series Relay

FEATURES

- High ratings 12 Amps super miniature relay.
- Surge strength: 5000 VAC.
- 1 Form A (SPST-NO) contact.
- TV-5 rated available.
- Nominal power 450mW.
- Operating power 260mW.
- DIL pitch terminal.
- Washable type.



TUV FILE NO: R50064549
UL FILE NO : E171095

ORDERING INFORMATION

$\frac{971}{1} - \frac{1A}{2} - \frac{12}{3} \quad \frac{D}{4}$	
1.Model Number	3.Coil Voltage 3~48V
2.Contact Arrangement 1A = 1 Form A (SPST-NO)	4.Coil Type D: DC

COIL RATINGS (at 20℃)

COIL TYPE	Coil Nominal Voltage (V)	Coil Resistance ($\Omega \pm 10\%$)	Pick-Up Voltage (V) $\leq$	Drop-Out Voltage (V) $\geq$	Nominal Current (mA)
DC Standard Coils	3	20	2.25	0.3	150
	5	55	3.75	0.5	90.9
	6	80	4.5	0.6	75
	9	180	6.75	0.9	50
	12	320	9	1.2	37.5
	18	720	13.5	1.8	25
	24	1280	18	2.4	18.8
	48	5120	36	4.8	9.4

* Max Continuous Voltage at 20℃: 130% of Coil Nominal Voltage.

CONTACT RATINGS

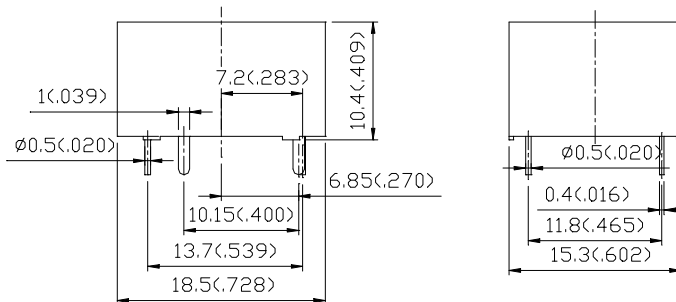
Contact Arrangement	1 Form A (SPST-NO)
Max. Switching Power	2500VA 300W
Max. Switching Voltage	250VAC 30VDC
Max. Switching Current	12A
Contact Resistance	$\leq 100\text{m}\Omega$
Resistive Load	12A/125VAC 10A/250VAC 10A/30VDC
Motor Load	1/4HP 125VAC 1/4HP 250VAC
Contact Material	Ag-Alloy

CHARACTERISTICS

Electrical Life	1×10^5 (Frequency 1200/hour)
Mechanical Life	1×10^7
Initial Insulation Resistance	Min. 100M Ω 500VDC
Contact Resistance (Initial)	$\leq 100\text{m}\Omega$
Operate Time	$\leq 10\text{ms}$
Release Time	$\leq 5\text{ms}$
Initial Dielectric Strength	50/60Hz 500VAC 1 min. (between open contacts) 50/60Hz 2500VAC 1 min. (between contacts and coil)
Vibration Resistance	Malfunction: 10 to 55Hz at Double Amplitude of 1.5mm Destructive: 10 to 55Hz at Double Amplitude of 1.5mm
Shock Resistance	Malfunction: 10G (11ms) / Destructive: 100G (6ms)
Ambient Temperature	$-20^\circ\text{C} \sim +60^\circ\text{C}$
Relative Humidity	85% at 40°C
Unit Weight	Approx. 6g

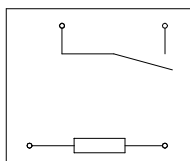
OUTLINE DIMENSIONS

Dimensions

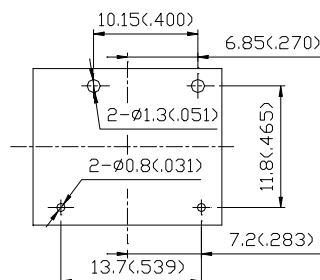


REMARK: Tolerance of outline dimensions: ± 0.2 (.008).

Internal Connections
(Bottom View)



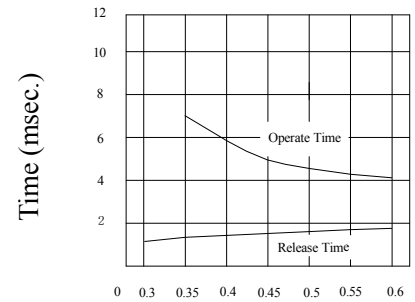
Drilling Plan
(Bottom View)



UNIT: mm (inch)

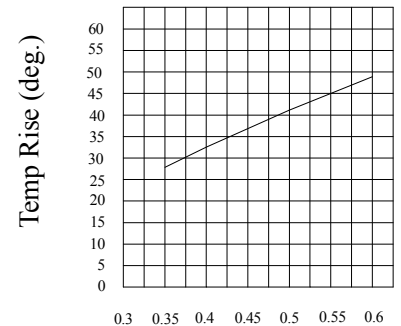
971 Referential Data

Timing



Coil Power (W)

Coil Temperature Rise



Coil Power (W)

Life Curves

