

FEATURES

- UL & TUV safety approval.
- 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.



UL FILE NO : E 171095

TUV FILE NO: R 50064549

CONTACT RATINGS

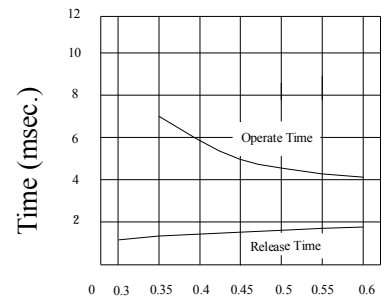
- Contact Arrangement1 Form A (SPST-NO)
- Max. Switching Power.....2500VA 300W
- Max. Switching Voltage.....250VAC 30VDC
- Max. Switching Current.....12A
- Contact Resistance..... $\leq 100m\Omega$
- Resistive Load.....12A/125VA
.....10A/250VAC ,
.....10A/30VDC
- Motor Load.....1/4HP 125VAC 1/4HP 250VAC
- Contact MaterialAg Alloy

CHARACTERISTICS

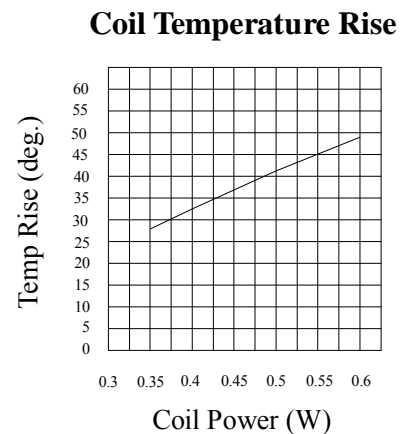
- Electrical Life..... 1×10^5 (Frequency 1200/hour)
- Mechanical Life..... 1×10^7
- Initial Insulation Resistance
.....Min. 100M Ω 500VDC
- Contact Resistance (Initial)..... $\leq 100m\Omega$
- Operate Time..... $\leq 10ms$
- Release Time..... $\leq 5ms$
- Initial Dielectric Strength
.....50/60Hz 500VAC 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..... $-20^{\circ}C \sim +60^{\circ}C$
- Relative Humidity.....85% at $40^{\circ}C$
- Unit Weight.....Approx. 6g

971 Referential Data

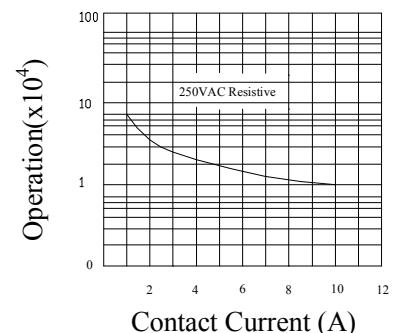
Timing



Coil Temperature Rise



Life Curves



ORDERING INFORMATION

971 - 1A - 12 D
 1 2 3 4

Coil Type.....D: DC
 Coil Voltage.....3~48V
 Contact Arrangement.....1A = 1 Form A (SPST-NO)
 Model Number.....971

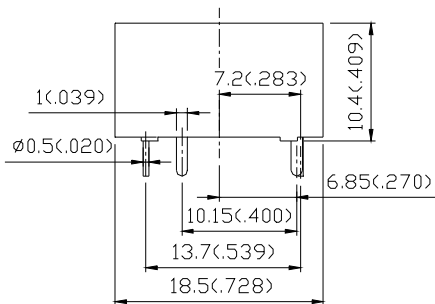
COIL RATINGS (at 20°C)

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

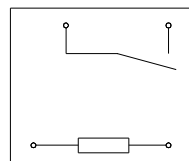
* Max Continuous Voltage at 20°C: 110% of Coil Nominal Voltage.

OUTLINE DIMENSIONS

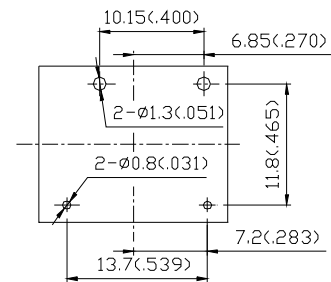
Dimensions



Internal Connections
(Bottom View)



Drilling Plan
(Bottom View)



REMARK: Tolerance of outline dimensions: $\pm 0.2(.008)$.

UNIT: mm (inch)