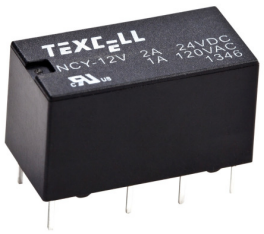
Subminiature DIP Relay	NCY

Features

- 2 Form C (DPDT) configuration
- Surge strength 1500V FCC68
  - Clearance more than 1.2mm between coil and contacts
  - Creepage more than 1.9mm between coil and contacts
- Bifurcated contacts



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1. COIL DATA (at 20℃)

1) Sensitive Type

Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Max Allowable Voltage (VDC)	Coil Current (mA)(±10%)	Coil Resistance (Ω)	Coil Power (mW)
3	2.25	0.3	3.90	66.7	45 x (1±10%)	200
5	3.75	0.5	6.50	40.0	125 x (1±10%)	
6	4.50	0.6	7.80	33.3	180 x (1±10%)	
9	6.80	0.9	11.7	22.2	405 x (1±10%)	
12	9.00	1.2	15.6	16.7	720 x (1±10%)	
24	18.0	2.4	31.2	8.33	2880 x (1±10%)	
48	36.0	4.8	62.4	7.50	6400 x (1±15%)	360

2) High Sensitive Type

Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Max Allowable Voltage (VDC)	Coil Current (mA)(±10%)	Coil Resistance (Ω)	Coil Power (mW)
3	2.4	0.3	3.90	50.0	60 x (1±10%)	150
5	4.0	0.5	6.50	30.0	167 x (1±10%)	
6	4.8	0.6	7.80	25.0	240 x (1±10%)	
9	7.2	0.9	11.7	16.7	540 x (1±10%)	
12	9.6	1.2	15.6	12.5	960 x (1±10%)	
24	18	2.4	31.2	6.25	3840 x (1±10%)	

2. CONTACT DATA

Contact Arrangement		2 Form C (DPDT)
Contact Resistance		100mΩ max. (at 1A 6VDC)
Contact Material		AgNi + Au plated
Load		Resistive load (COSΦ=1)
Contact Ratings (Resistive Load)		1A 120VAC / 2A 24VDC
Minimum Load		1mA 5VDC
Max. Switching Voltage		240VAC / 60VDC
Max. Switching Current		2A
Max. Switching Power		120VA / 60W
Life Expectancy	Electrical	100,000 operations (at 30 operations/minute)
	Mechanical	10,000,000 operations (at 300 operations/minute)

3. CHARACTERISTICS

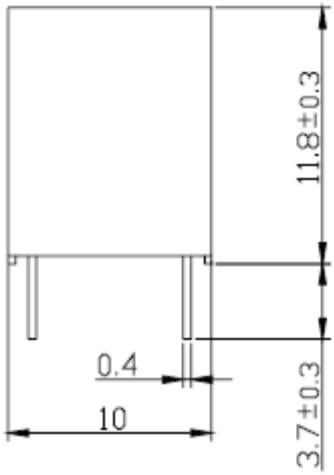
Insulation Resistance		100MΩ Min. (at 500VDC)
Dielectric Strength	Open Contacts	500VAC 1mm
	Contacts and Coil	1000VAC 1min
Operate Time (at nominal voltage)		6ms max.
Release Time (at nominal voltage)		4ms max.
Temperature Range		-30℃ ~ 70℃
Shock Resistance	Operation Extremes	10G
	Damage Limits	50G
Vibration Resistance		10 ~ 55Hz, 1.5mm
Max. switching frequency	Mechanical	18,000 operations/hr
	Electrical	1,800 operations/hr
Humidity		40 ~ 85% RH
Termination		PCB (DIP)
Weight		Approx. 5g
Outline Dimension (L x W x H)		20.5 x 10.0 x 11.8 mm

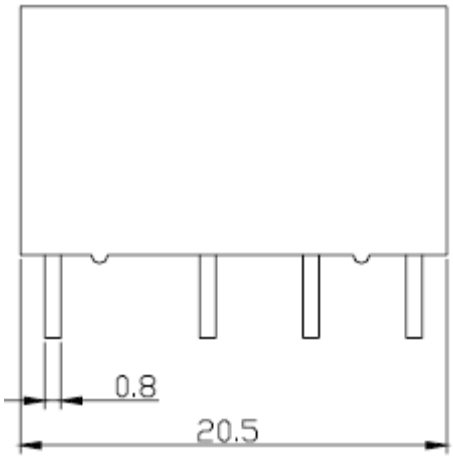
4. ORDERING INFORMATION

NCY - 5V H ① ② ③	
① Relay Model	NCY
② Coil Voltage	3V=3VDC, 5V=5VDC, 6V=6VDC, 9V=9VDC, 12V=12VDC, 15V=15VDC, 24V=24VDC, 48V=48VDC
③ Coil Power	Nil: Sensitive type (200mW) H: High-sensitive type (150mW)

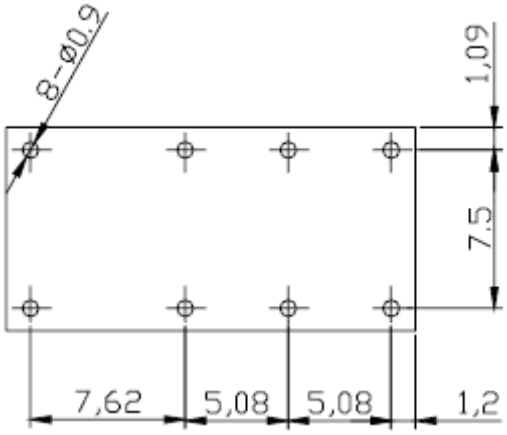
5. DIMENSIONS (Unit: mm)

Outline Dimensions

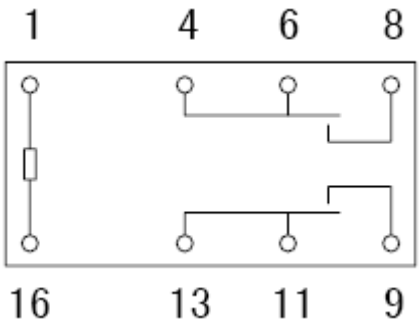




PCB Layout
(Bottom View)



Wiring Diagram
(Bottom View)



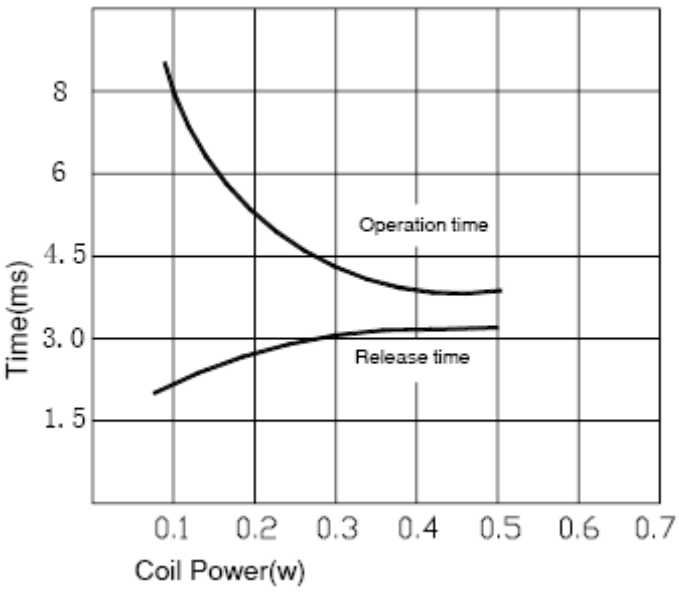
Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

2) The tolerance without indicating for PCB layout is always ±0.1mm.

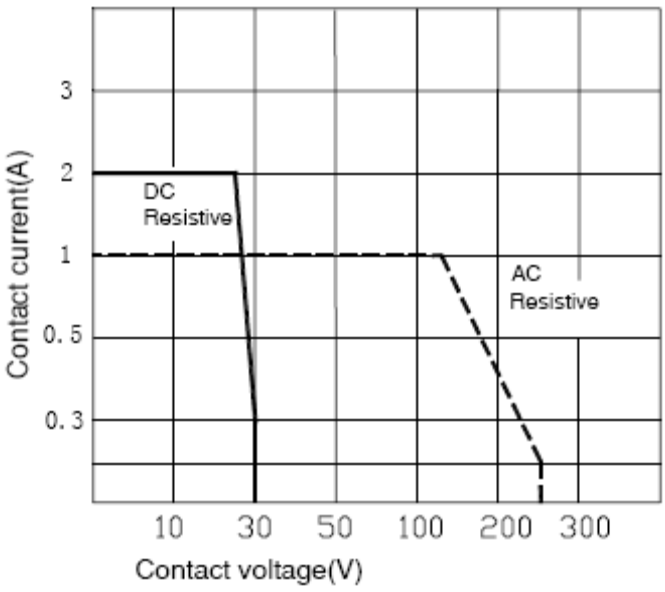
3) The width of the gridding is 2.54mm.

6. CHARACTERISTIC CURVES

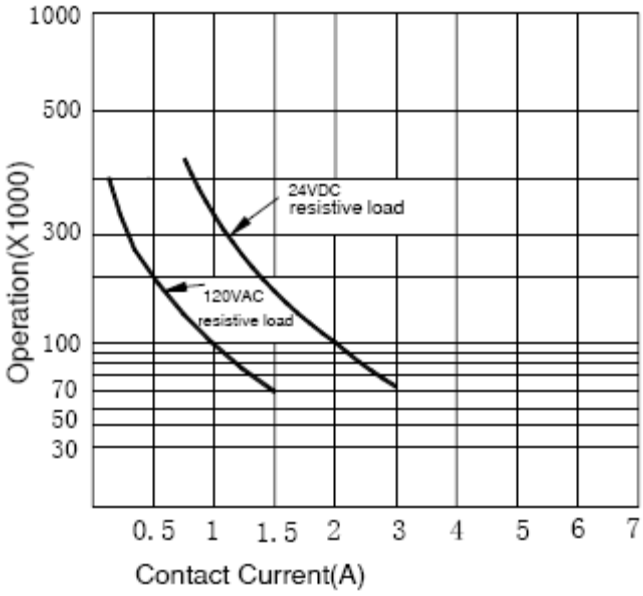
Timing



Coil Temperature Rise



Life Expectancy



Ambient Temperature
Vs. Maximum Voltage