Subminiature DIP Relay	ECY

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
- Matching 16 pin IC socket
- High sensitivity
- Plastic sealed type

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(File No.:E122258)

1. COIL DATA (at 20°C)

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	6.75	0.9	11.7	22.2	405 x (1±10%)	
12	9	1.2	15.6	16.7	720 x (1±10%)	
24	18	2.4	31.2	8.33	2880 x (1±10%)	

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	2.40	0.15	3.90	50.0	60 x (1±10%)	150
5	4.00	0.25	6.50	30.0	167 x (1±10%)	
6	4.80	0.30	7.80	25.0	240 x (1±10%)	
9	7.20	0.45	11.7	16.7	540 x (1±10%)	
12	9.60	0.60	15.6	12.5	960 x (1±10%)	
24	19.2	1.20	31.2	6.25	3840 x (1±10%)	

Note: The maximum allowable voltage refers to the maximum voltage which relay coil could endure in a short period of time.

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 / 30VDC
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

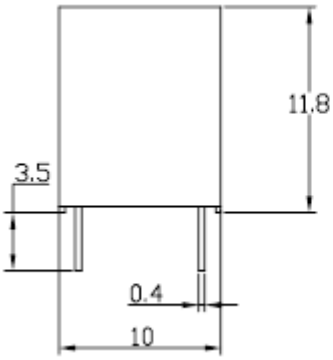
Insulation Resistance		100MΩ Min. (at 500VDC)
Dielectric Strength	Open Contacts	500VAC (50/60Hz 1min)
	Contacts and Coil	1000VAC (50/60Hz 1min)
Operate Time (at nominal voltage)		8ms max.
Release Time (at nominal voltage)		4ms max.
Temperature Range		-40℃ ~ 85℃
Shock Resistance	Functional	10G
	Destructive	50G
Vibration Resistance		10 ~ 55Hz, 1.5mm DA
Humidity		5 ~ 85% RH
Termination		PCB (DIP)
Weight		Approx. 5g
Outline Dimension (L x W x H)		20.5 x 10.0 x 11.8mm

4. ORDERING INFORMATION

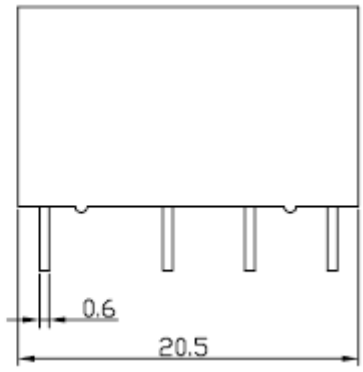
ECY - 5V H ① ② ③	
① Relay Model	ECY
② Coil Voltage	3V=3VDC, 5V=5VDC, 6V=6VDC, 9V=9VDC, 12V=12VDC, 15V=15VDC, 24V=24VDC, 48V=48VDC
③ Coil Power	Nil: Sensitive type (200mW) H: High-sensitive type (150mW)

5. DIMENSIONS (Unit: mm)

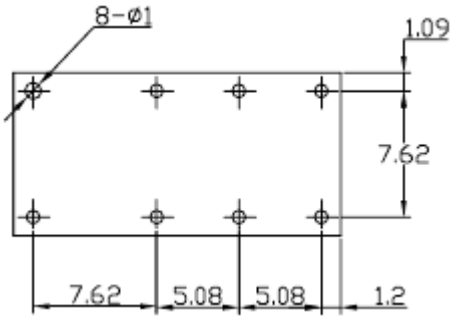
Outline Dimensions

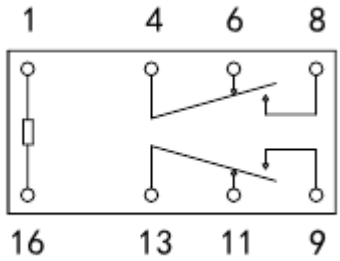


PCB Layout
(Bottom View)



Wiring Diagram
(Bottom View)





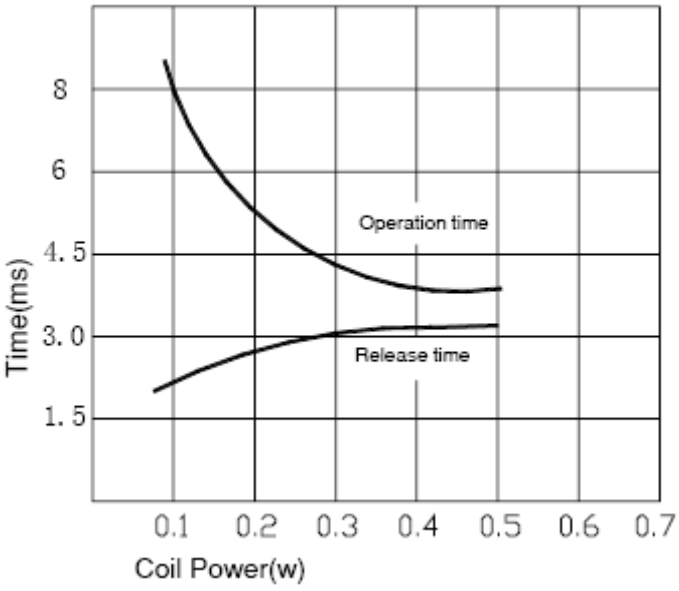
Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

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

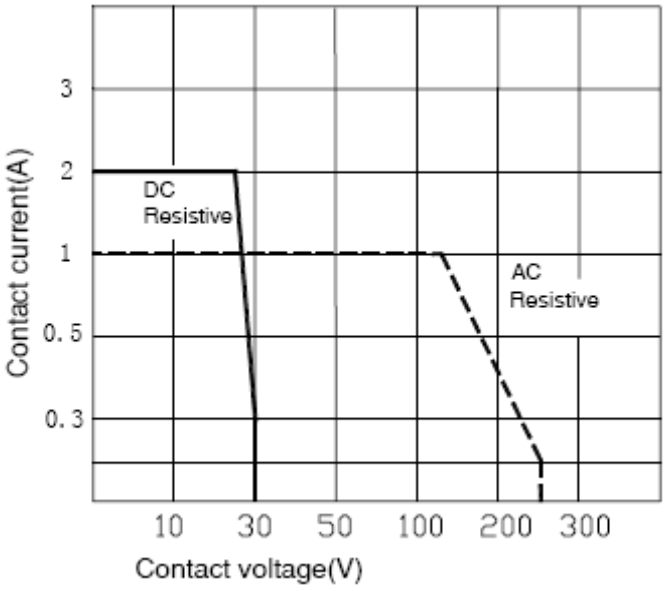
3) The additional tin top is max. 1mm.

6. CHARACTERISTIC CURVES

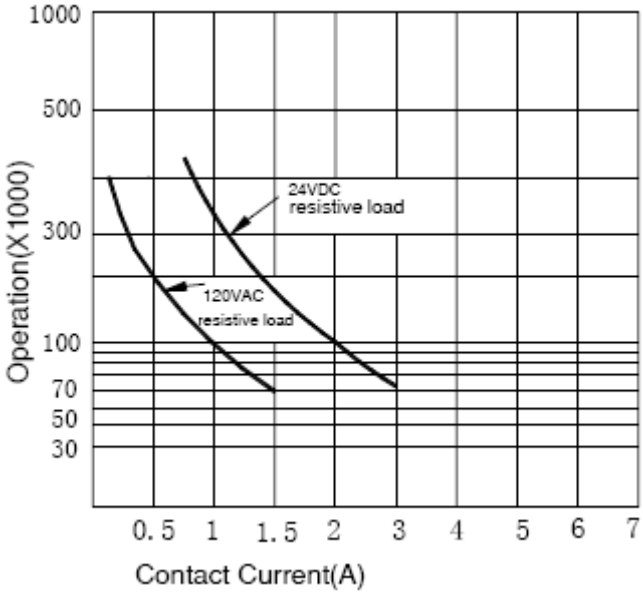
Timing



Contact Switching Capacity



Life Expectancy



Ambient Temperature
Vs. Maximum Voltage