

# 941 Series Relay

## FEATURES

- UL safety approval.
- Standard type & High sensitivity type available.
- High reliability – twin contact.
- Silver palladium overlaid gold crossbar contact type suitable for lower level switching application.
- DIL pitch terminal.
- High mounting density on P.C. board due to small size and lightweight.
- Nominal power 150mW ~ 500mW.
- Operating power 100mW~300mW.

## CONTACT RATINGS

- Contact Arrangement..... 2 Form C (DPDT)
- Max. Switching Power..... 125VA 60W
- Max. Switching Voltage..... 125VAC 30VDC
- Max. Switching Current..... 2A
- Contact Resistance.....  $\leq 100m\Omega$
- Rating Load..... 1A/125VAC 2A/30VDC
- Contact Material..... Ag Alloy

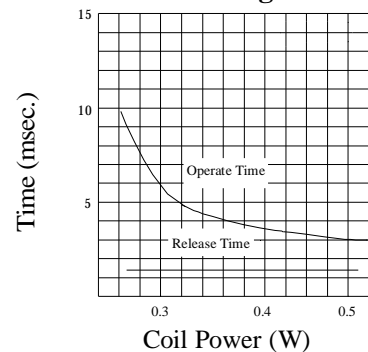
## CHARACTERISTICS

- Electrical Life.....  $2 \times 10^5$
- Mechanical Life.....  $2 \times 10^7$
- Insulation Resistance..... Min. 1000M $\Omega$  500VDC
- Contact Resistance (Initial).....  $\leq 100m\Omega$
- Operate Time.....  $\leq 6ms$
- Release Time.....  $\leq 3ms$
- Dielectric Strength
  - .....50/60Hz 500VAC 1 min. (between open contacts)
  - .....50/60Hz 1000VAC 1 min. (between contacts and coil )
  - .....50/60Hz 1000VAC 1 min. (between contact sets)
- Surge strength.....1500VAC
- 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.....  $-30^{\circ}C \sim +70^{\circ}C$
- Relative Humidity.....85% at  $40^{\circ}C$
- Unit Weight.....Approx. 5g

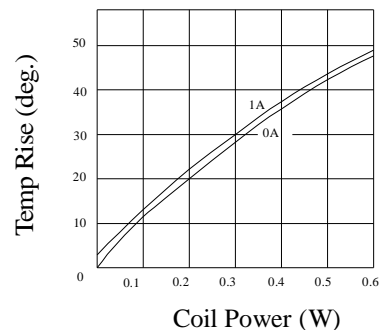


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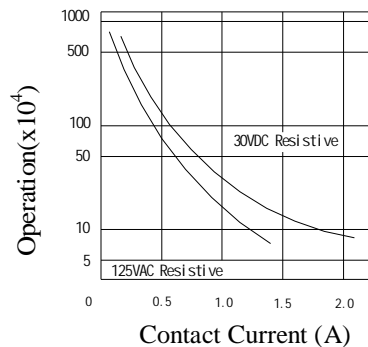
## 941 Referential Data Timing



## Coil Temperature Rise



## Life Curves



# ORDERING INFORMATION

941 H - 2C - 12 D  
 1 2 3 4 5

Coil Type..... D: DC  
 Coil Voltage.....4.5~48V  
 Contact Arrangement.....2C = 2 Form C (DPDT)  
 Coil Sensitivity..... Nil = Standard Type  
 .....H = High Sensitive Type  
 Model Number.....941

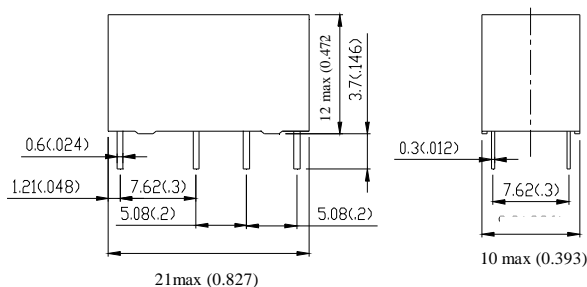
## COIL RATINGS (at 20°C)

COIL TYPE	Coil Nominal Voltage (V)	Coil Resistance ( $\Omega \pm 10\%$ )	Pick-Up Voltage (V) $\leq$	Drop-Out Voltage (V) $\geq$	Nominal Current (mA)	Nominal Power (W)
DC	4.5	135	3.375	0.225	33.3	0.15
	5	166.7	3.75	0.25	30.3	
	6	240	4.5	0.3	25	
	12	960	9	0.6	12.5	
	24	3840	18	1.2	6.3	
High Sensitive Coils	4.5	101	3.375	0.225	44.6	0.20
	5	125	3.75	0.25	40	
	6	180	4.5	0.3	33.3	
	9	405	6.75	0.45	22.2	
	12	720	9	0.6	16.7	
DC	4.5	56	3.375	0.225	80.4	0.36
	5	70	3.75	0.25	71.4	
	6	100	4.5	0.3	60	
	12	400	9	0.6	30	
	24	1600	18	1.2	15	
Standard Coils	4.5	39.7	3.375	0.225	113.4	0.51
	5	49	3.75	0.25	102.0	
	6	70.6	4.5	0.3	85.0	
	12	282.4	9	0.6	42.5	
	24	1129.4	18	1.2	21.3	
	48	4517.6	36	2.4	10.6	

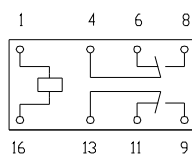
\* Max Continuous Voltage at 20°C: 110% of Coil Nominal Voltage.

## OUTLINE DIMENSIONS

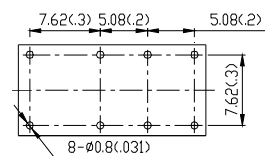
### Dimensions



### Internal Connections (Bottom View)



### Drilling Plan (Bottom View)



REMARK: Tolerance of outline dimensions:  $\pm 0.1(.004)$ .

UNIT: mm (inch)