



# 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 and 500mW.
- Operating power 100mW~300mW.



UL FILE NO: E162117

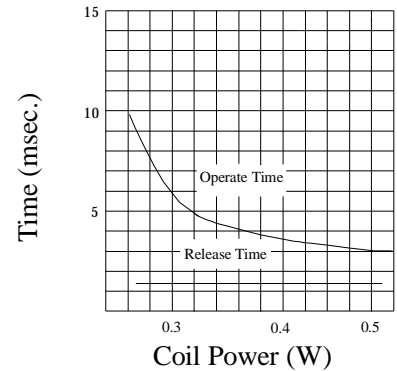
## CONTACT RATINGS

- 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

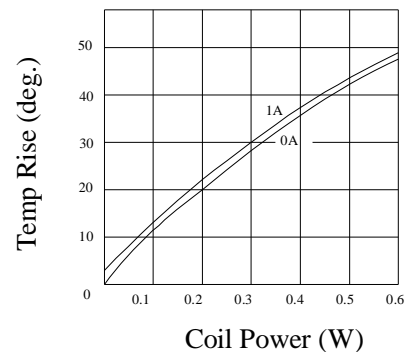
## CHARACTERISTICS

- Electrical Life.....  $2 \times 10^5$
- Mechanical Life.....  $2 \times 10^7$
- Initial Insulation Resistance  
..... Min. 1000M $\Omega$  500VDC
- Contact Resistance (Initial).....  $\leq 100m\Omega$
- Operate Time.....  $\leq 6ms$
- Release Time.....  $\leq 3ms$
- Initial 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)
- 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

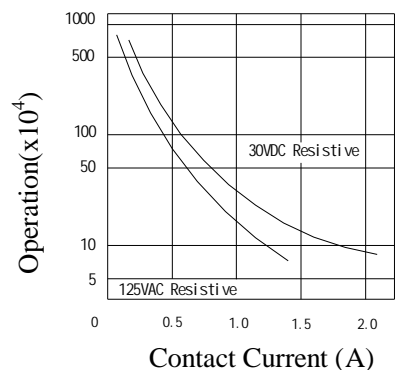
## 941 Referential Data Timing



## Coil Temperature Rise



## Life Curves



**ORDERING INFORMATION**

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

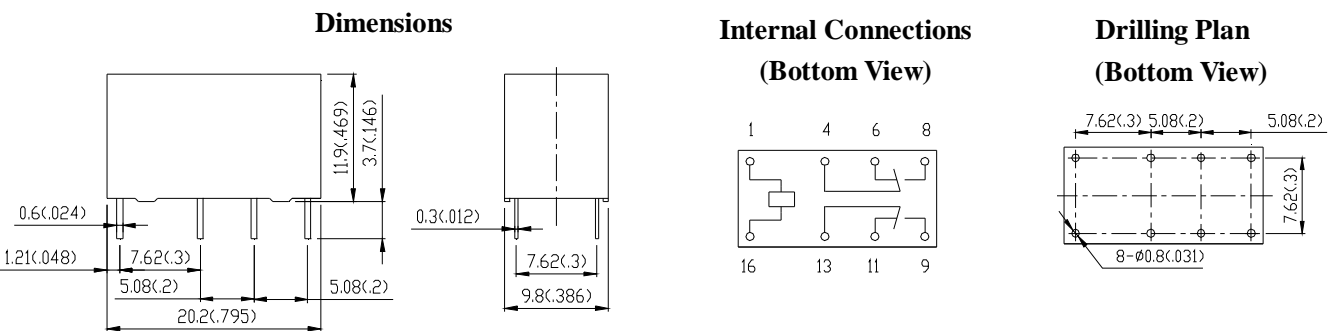
Coil Type.....	D: DC
Coil Voltage.....	4.5~48V
Contact Arrangement.....	2C = 2 Form C (DPDT)
Coil Sensitivity.....	Nil = Standard Type .....H = High Sensitive Type
Model Number.....	941

**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)
DC Standard Coils	4.5	36	3.375	0.225	125
	5	45	3.75	0.25	111
	6	70	4.5	0.3	85.7
	12	280	9	0.6	42.9
	24	1070	18	1.2	22.4
	48	4300	36	2.4	11.2
DC High Sensitive Coils	4.5	135	3.6	0.225	33.3
	5	167	4	0.25	29.9
	6	240	4.8	0.3	25
	9	540	7.2	0.45	16.7
	12	960	9.6	0.6	12.5
	24	3840	19.2	1.2	6.3

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

**OUTLINE DIMENSIONS**



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

UNIT: mm (inch)