HSIN DA

942 Series Relay

FEATURES

- UL, CSA , TUV & CQC safety approval.
- Standard type & High sensitivity type available.
- UL Class F (155℃) coil insulation type available.
- TV Rated (TV-3, TV-5 or TV-8) available.
- Heavy current up to 20Amps.
- Insulation distance: 8mm.
- Dielectric strength: 5,000 VAC.
- High sensitivity in small package.
- Nominal power 540mW～720mW.
- Operating power 300mW～410mW.
- Contacts gap: Standard type & gap:3.0mm type(for DPST-NO)

UL FILE NO : E162117
CSA FILE NO : LR107041-2
TUV FILE NO: R50048089
CQC FILE NO: CQC02001001786

CONTACT RATINGS

●Contact Arrangement

...…1A、1B、1C (942T ONLY)

….. 2A、2B、2C、1A、1B、1C

●Max. Switching Power

1A、1B、1C (942T ONLY)……4000VA 600W

1A、1B、1C…….…….3000VA 480W

2A…….…… …….1750VA 210W

2B、2C…….……..1250VA 150W

● Max. Switching Voltage

1A、1B、1C…… ……250VAC 48VDC

2A；2B、2C..…….... 250VAC 30VDC

● Max. Switching Current

1A、1B、1C……..…..….20A

1A、1B、1C……..…..12A

2A….…… ……7A

2B、2C…….……....5A

●Contact Resistance……≤100mΩ

●Contact Material ……Ag Alloy

●Contact Load Resistive Load(Cosφ=1)

1A、1B、1C (942T ONLY)…..16A/250VAC

……...20A/30VDC

…….....20A/125VAC

……...10A/48VDC

942(1A、1B、1C) ……..…...…12A/250VAC

…….…12A/30VDC

…….…10A/48VDC

942(2A)……...……...7A/250VAC

…….7A/30VDC

942(2B、2C)…….…….....5A/250VAC

……..….... 5A/30VDC

●Inductive Load(Cosφ=0.4, L/R=7ms)

942-T (1A、1B、1C)……..…8A/250VAC

……8A/30VDC

942(1A、1B、1C)……...……5A/250VAC

……..….5A/30VDC

942 (2A、2B、2C)…….....….... 2A/250VAC

……..…… 2A/30VDC

● TV Rating

942-T (1A、1B、1C)….TV-3/ TV-8

942(1A、1B、1C)……..TV-3/ TV-5

942(2A)……...TV-3

CHARACTERISTICS

- ●Electrical Life..…….. 1×10^5
- ●Mechanical Life…….…..……1×10^7
- ●Initial Insulation Resistance

  ……..…Min.100MΩ 500 VDC
- ●Contact Resistance (Initial)……≤100mΩ
- ●Operate Time……. ≤15ms
- ●Release Time…… ≤8ms
- ● Initial Dielectric Strength

  ……...50/60Hz 1000VAC 1 min. (between open contacts)

  …..…….….50/60Hz 5000VAC 1 min. (between contacts and coil)

  ……..…..50/60Hz 2500VAC 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……..－40℃～＋80℃
- ●Relative Humidity……85% at 40℃
- ●Unit Weight …….Approx. 17g

ORDERING INFORMATION

942 H - 1A - 12 - D S - T - F

1 2 3 4 5 6 7 8

Type of Insulation…….Nil = Class A

……..…F = Class F

Terminal Type ……Nil = One Foot

……..…T = Two Feet (Remark:"T"is for 1 Pole only)

Enclosure……Nil = Flow Solder Type

...…….…..S = Sealed Type

Coil Type……D: DC

……A: AC

Coil Voltage…..…..……DC: 3~110V

…….. AC: 6~120V

Contact Arrangement…….. 1A = 1 Form A (SPST-NO)

……..…1B = 1 Form B (SPST-NC)

…….……1C = 1 Form C (SPDT)

……...….2A = 2 Form A (DPST-NO)

…….2B = 2 Form B (DPST-NC)

…….……2C = 2 Form C (DPDT)

Coil Sensitivity……... Nil = Standard Type(For AC coil only)

……..… H = High Sensitive Type(For DC coil only)

Model Number……..…942

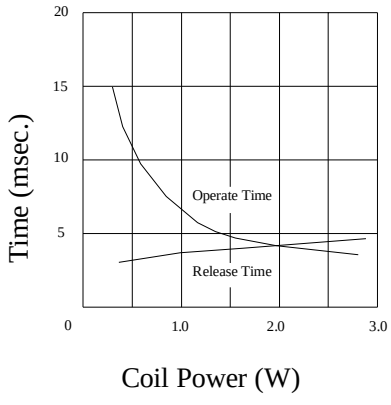
COIL RATINGS (at 20℃)

COIL TYPE	Coil Nominal Voltage (V)	Coil Resistance (Ω ±10%)	Pick-Up Voltage (V) ≤	Drop-Out Voltage (V) ≥	Nominal Current (mA)
DC Standard Coils	3	12.5	2.1	0.3	240
	5	36	3.5	0.5	138.9
	6	50	4.2	0.6	120
	9	115	6.3	0.9	78.3
	12	200	8.4	1.2	60
	24	820	16.8	2.4	29.3
	48	3300	33.6	4.8	14.5
	100/110	14144	70	10	7
DC High Sensitive Coils	3	17	2.25	0.3	176.5
	5	47	3.75	0.5	106.4
	6	68	4.5	0.6	88
	9	155	6.75	0.9	58
	12	270	9	1.2	44.4
	24	1100	18	2.4	21.8
	48	4400	36	4.8	10.9
	100/110	18860	75	10	5.3
AC	6	16.5	4.8	1.8	
	12	63	9.6	3.6	
	24	250	19.2	7.2	
	110/120	5600	88	33	
	220/240	22000	176	66	

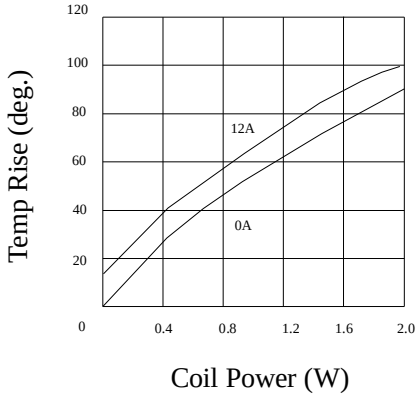
* Max Continuous Voltage at 20℃: 110% of Coil Nominal Voltage.

942-1A 、942-1B 、942-1C Referential Data

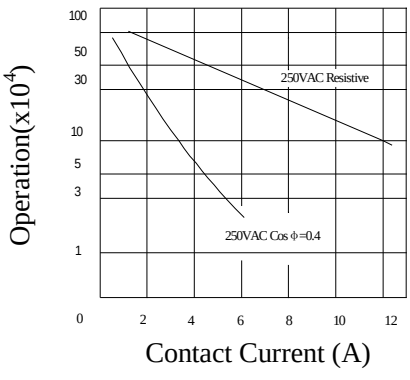
Timing



Coil Temperature Rise

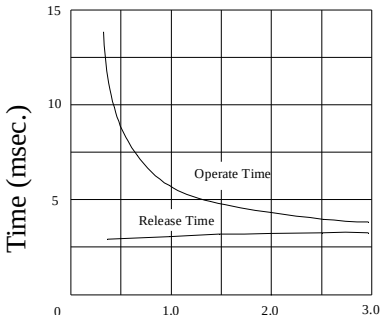


Life Curves

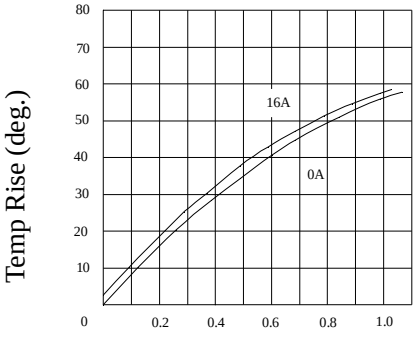


942-1A-T 、942-1B -T、942-1C-T Referential Data

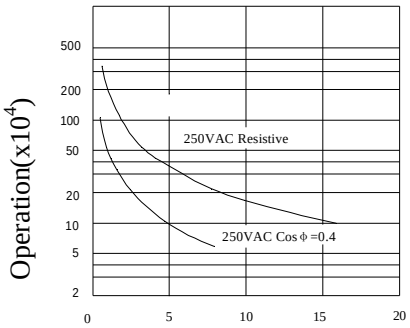
Timing



Coil Temperature Rise

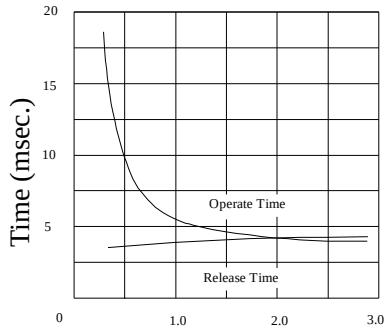


Life Curves

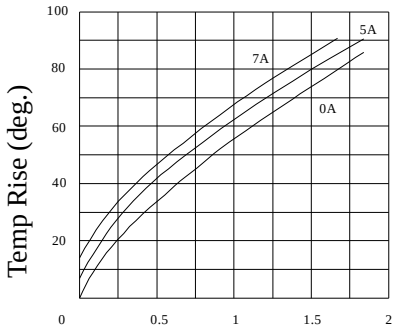


942-2A 、942-2B 、942-2C Referential Data

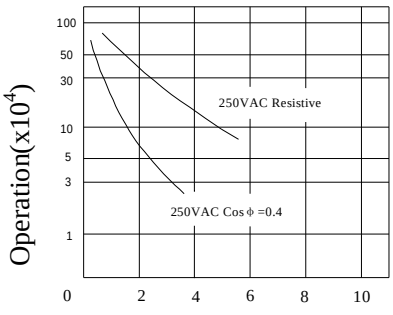
Timing



Coil Temperature Rise

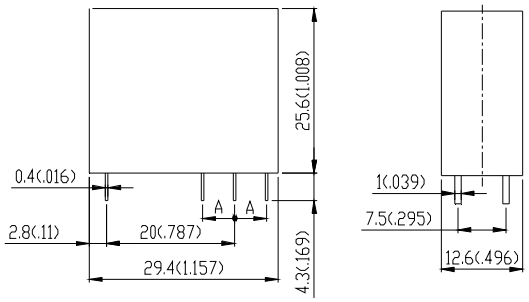


Life Curves



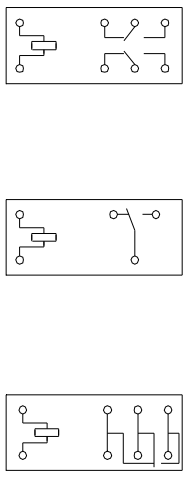
OUTLINE DIMENSIONS

Dimensions

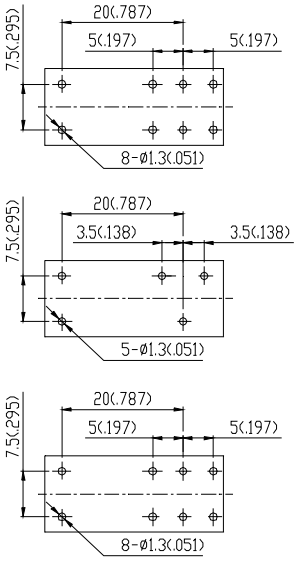


A：3.5 (.138) ; 5.0 (.197)

Internal Connections (Bottom View)



Drilling Plan (Bottom View)



REMARK: Tolerance of outline dimensions: ±0.2(.008).

UNIT：mm (inch)