

Features

- 8A/12A miniature PCB Power Relay.
- Large contact gap : 2mm/1.5mm.
- High dielectric strength and comply with IEC 16950.
- Epoxy seal type and sealed flux free are both available.
- Design for UPS and power supply application.
- Comply with RoHS-Directive 2002/95/EC.

Type List

◆Standard Type

Terminal style	Contact form	Contact gap	Designation (provided with)		
			Flux tight	Sealed type	Sealed type washable
PCB terminal	2A (DPNO)	1.5mm	894-2AC1-F-C	894-2AC1-F-V	894-2AC1-F-S
			894-2ACA1-F-C	894-2ACA1-F-V	894-2ACA1-F-S
		2.0mm	894-2AC2-F-C	894-2AC2-F-V	894-2AC2-F-S
			894-2ACA2-F-C	894-2ACA2-F-V	894-2ACA2-F-S
		1.5mm	894-2AH1-F-C	894-2AH1-F-V	894-2AH1-F-S
			894-2AHA1-F-C	894-2AHA1-F-V	894-2AHA1-F-S
		2.0mm	894-2AH2-F-C	894-2AH2-F-V	894-2AH2-F-S
			894-2AHA2-F-C	894-2AHA2-F-V	894-2AHA2-F-S
	2C (DPDT)	1.5mm	894-2CC1-F-C	894-2CC1-F-V	894-2CC1-F-S
			894-2CCA1-F-C	894-2CCA1-F-V	894-2CCA1-F-S
		2.0mm	894-2CC2-F-C	894-2CC2-F-V	894-2CC2-F-S
			894-2CCA2-F-C	894-2CCA2-F-V	894-2CCA2-F-S
		1.5mm	894-2CH1-F-C	894-2CH1-F-V	894-2CH1-F-S
			894-2CHA1-F-C	894-2CHA1-F-V	894-2CHA1-F-S
		2.0mm	894-2CH2-F-C	894-2CH2-F-V	894-2CH2-F-S
			894-2CHA2-F-C	894-2CHA2-F-V	894-2CHA2-F-S

◆High Power Type

PCB terminal	2A (DPNO)	1.5mm	894H-2AC1-F-C	894H-2AC1-F-V	894H-2AC1-F-S
			894H-2ACA1-F-C	894H-2ACA1-F-V	894H-2ACA1-F-S
		2.0mm	894H-2AC2-F-C	894H-2AC2-F-V	894H-2AC2-F-S
			894H-2ACA2-F-C	894H-2ACA2-F-V	894H-2ACA2-F-S
		1.5mm	894H-2AH1-F-C	894H-2AH1-F-V	894H-2AH1-F-S
			894H-2AHA1-F-C	894H-2AHA1-F-V	894H-2AHA1-F-S
		2.0mm	894H-2AH2-F-C	894H-2AH2-F-V	894H-2AH2-F-S
			894H-2AHA2-F-C	894H-2AHA2-F-V	894H-2AHA2-F-S
	2C (DPDT)	1.5mm	894H-2CC1-F-C	894H-2CC1-F-V	894H-2CC1-F-S
			894H-2CCA1-F-C	894H-2CCA1-F-V	894H-2CCA1-F-S

PCB terminal	2C (DPDT)	2.0mm	894H-2CC2-F-C	894H-2CC2-F-V	894H-2CC2-F-S
			894H-2CCA2-F-C	894H-2CCA2-F-V	894H-2CCA2-F-S
		1.5mm	894H-2CH1-F-C	894H-2CH1-F-V	894H-2CH1-F-S
			894H-2CHA1-F-C	894H-2CHA1-F-V	894H-2CHA1-F-S
		2.0mm	894H-2CH2-F-C	894H-2CH2-F-V	894H-2CH2-F-S
			894H-2CHA2-F-C	894H-2CHA2-F-V	894H-2CHA2-F-S

◆ High Sensitivity Type

Terminal style	Contact form	Designation (provided with)		
		Flux tight	Sealed type	Sealed type washable
PCB terminal	2A (DPNO)	894N-2AC-F-C	894N-2AC-F-V	894N-2AC-F-S
		894N-2ACA-F-C	894N-2ACA-F-V	894N-2ACA-F-S
		894N-2AH-F-C	894N-2AH-F-V	894N-2AH-F-S
		894N-2AHA-F-C	894N-2AHA-F-V	894N-2AHA-F-S
	2C (DPDT)	894N-2CC-F-C	894N-2CC-F-V	894N-2CC-F-S
		894N-2CCA-F-C	894N-2CCA-F-V	894N-2CCA-F-S
		894N-2CH-F-C	894N-2CH-F-V	894N-2CH-F-S
		894N-2CHA-F-C	894N-2CHA-F-V	894N-2CHA-F-S

Ordering Information

894 □ □ - 2C C □ - □ - C
1 2 3 4 5 6 7 8

1. 894 -- Basic series designation

2. Blank -- Standard type
   H -- High power type

3. Blank -- Standard type (0.8 W; 1.4 W for 2CX2 only)
   N -- High sensitivity type (0.53 W)

4. 2A -- Double pole normally open
   2B -- Double pole normally closed
   2C -- Double pole double throw

5. C -- Contact material AgNi
   CA -- Contact material AgNi + Au
   H -- Contact material AgSnO
   HA -- Contact material AgSnO+ Au

6. Blank -- Standard type
   1 -- Contact gap ≧ 1.5mm
   2 -- Contact gap ≧ 2.0mm

7. Blank -- Standard type
   F -- Class F

8. C -- Flux tight
   V -- Sealed type
   S -- Sealed type washable

Contact Rating

Type	894	894H
Resistive load	8A 240VAC	NO：12A 240VAC NC ：10A 240VAC

Coil Rating (DC)

◆Standard Type

Rated voltage (V)	Rated current ±10% at 23°C (mA)	Coil resistance ±10% at 23°C (Ω)	Max. continuous voltage at 70°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
3	265	11.3	150 % of rated voltage	# of rated voltage (See note)	5 % of rated voltage	approx. 0.8W
5	161	31				
6	133	45				
9	89.1	101				
12	66.6	180				
18	44.4	405				
24	32.4	740				
48	16.7	2880				
60	13.3	4500				
110	7.3	15125				

Notes： # = 75% Contact form 2A / Contact gap 1.5mm only
= 85% Contact form 2C / Contact gap 1.5mm only
= 85% Contact form 2A / Contact gap 2.0mm only

◆ Standard Type (for 〝-2CX2〞 only)

Rated voltage (V)	Rated current ±10% at 23°C (mA)	Coil resistance ±10% at 23°C (Ω)	Max. continuous voltage at 70°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
3	468	6.4	130 % of rated voltage	85 % of rated voltage	5 % of rated voltage	approx. 1.4W
5	277	18				
6	230	26				
9	155	58				
12	117	102				
18	78	230				
24	58	410				
48	29	1650				
60	23	2570				
110	13	8640				

◆ High Sensitivity Type

Rated voltage (V)	Rated current ±10% at 23°C (mA)	Coil resistance ±10% at 23°C (Ω)	Max. continuous voltage at 70°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
3	175	17.1	150 % of rated voltage	75 % of rated voltage	5 % of rated voltage	approx. 0.53W
5	107	46.7				
6	87	68.7				
9	59	153.2				
12	44	272				
18	30	610				
24	22	1,081				
48	11	4,350				
60	8.8	6,790				
110	4.8	22,800				

Specification

Contact material	AgNi / AgSnO alloy	
Contact resistance (1)	100mΩ Max. (1A(100mA for Au-plating contact)/6VDC by 4 pipes mΩ meter)	
Operate time (1)	20ms Max.	
Release time (1)	15ms Max.	
Insulation resistance (1)	1000MΩ Min. (DC 500V)	
Dielectric strength (1)	Between open contact : AC 2500V , 50/60Hz 1 min. AC 1000V , 50/60Hz 1 min. (for 894N/894HN)	
	Between contact circuits : AC 2500V , 50/60Hz 1 min.	
	Between contact and coil : AC 5000V , 50/60Hz 1 min.	
Vibration resistance	Operating extremes	10～55Hz , amplitude 1.5 mm
	Damage limits	10～55Hz , amplitude 1.5 mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	3,000,000 operations (frequency 18,000 operations/hr)
		300,000 operations (for contact gap 2mm type) (frequency 9,000 operations/hr)
	Electrical	30,000 operations (frequency 360 operations/hr)
Operating ambient temperature	-40～+70°C (no freezing)	
Weight	Approx. 17 g	

Note：(1) initial value

Safety Approval

Certified	TUV	CSA / CUS	UL / CUL	VDE
File No.	R 50008226	1223057	E88991	40007827

Safety Approval Rating

◆UL/CUL、CSA/CUS

894		894H	
C、CA	H、HA	C、CA	H、HA
8A 277VAC 1/4HP 125VAC 1/2HP 250VAC	8A 277VAC 1/4HP 125VAC 1/2HP 250VAC TV-3 (NO)	12A 277VAC 1/3HP 125VAC	12A 277VAC 1/3HP 125VAC 3/4HP 250VAC (NO) TV-5(NO)

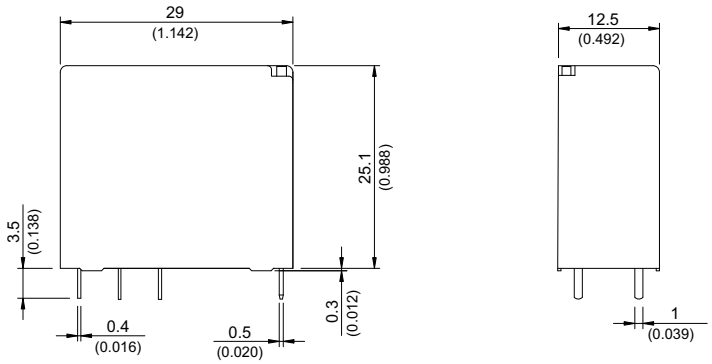
◆VDE

894	894N	894H	894HN
8A 250VAC T55	8A 250VAC T70	10A 250VAC T55	10A 250VAC T70

◆TUV

894	894H
8A 277VAC	12A 250VAC

Outline Dimensions



Wiring Diagram

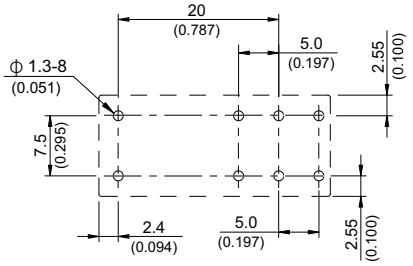
BOTTOM VIEW



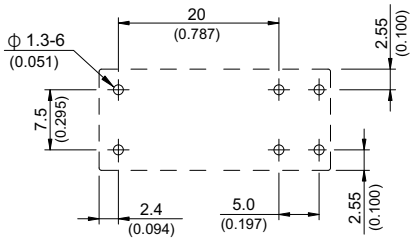
PC Board Layout

BOTTOM VIEW

2C

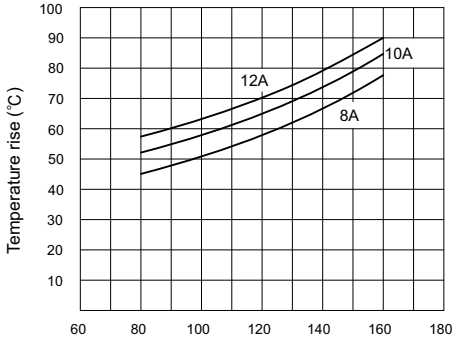


2A

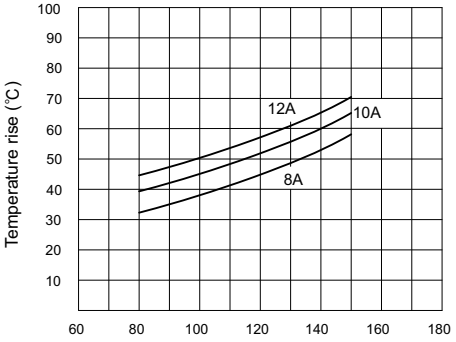


Engineering Data

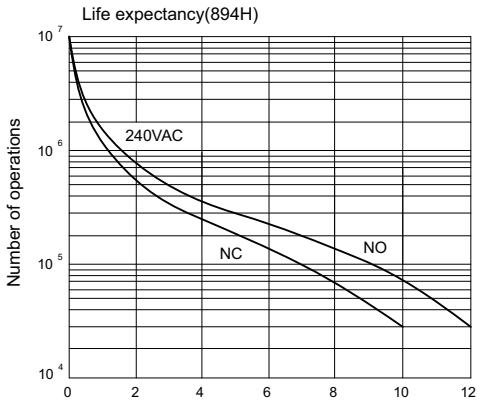
Coil temperature rise



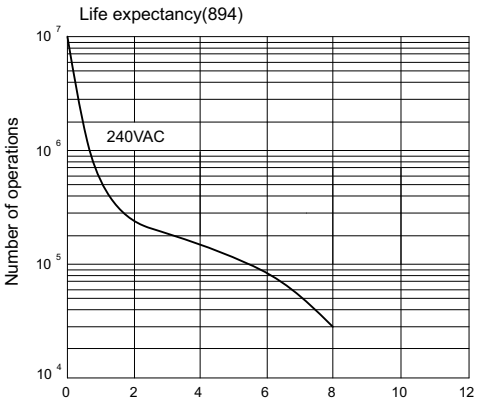
Coil temperature rise



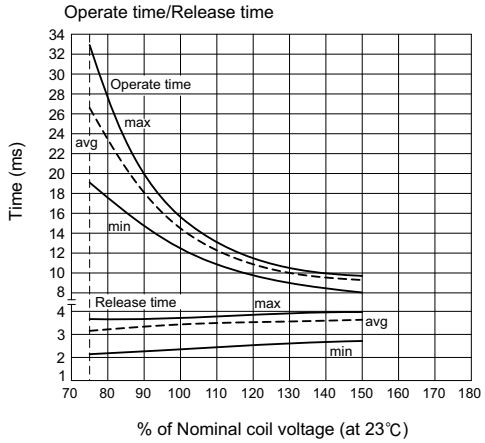
Life expectancy(894H)



Life expectancy(894)



Operate time/Release time



All specifications subject to change. Please contact Song Chuan for update.