

Features

- High sensitivity, 75mW pick-up
- Low profile, 20.2(L) × 9.8(W) × 10.0(H) mm
- DIL pin arrangement in 2.54mm pitch
- High reliability ensured by gold overlay bifurcated contacts
- Epoxy sealed for automatic wave soldering and cleaning
- Plastic materials meet UL94V-0

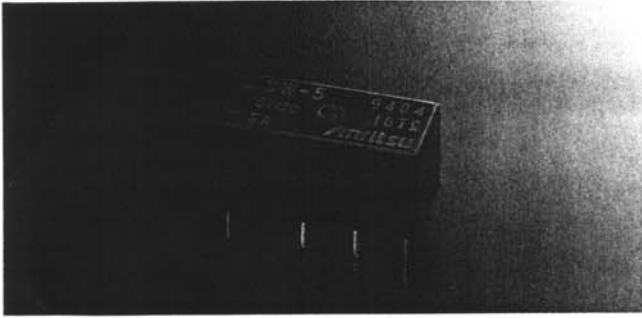
STANDARD TYPE

Type	Nominal voltage (Vdc)	Coil resistance at 20°C (Ω)	Operate voltage	Release voltage	Nominal power consumption (mW)
			at 20°C (Vdc)		
SW-4.5	4.5	135 ± 10%	3.2	0.45	150
SW-5	5	167 ± 10%	3.5	0.5	150
SW-6	6	240 ± 10%	4.2	0.6	150
SW-9	9	540 ± 10%	6.3	0.9	150
SW-12	12	960 ± 10%	8.4	1.2	150
SW-24B	24	3840 ± 10%	16.8	2.4	150
SW-48B	48	15360 ± 10%	33.6	4.8	150

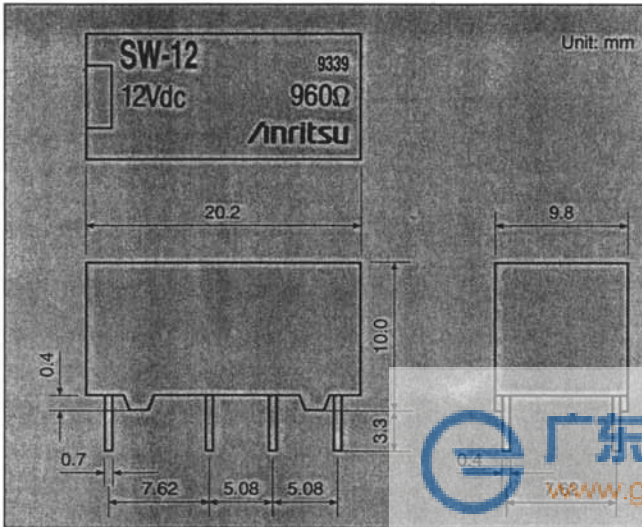
Other types such as 200 mW or 550 mW are available.

SPECIFICATIONS

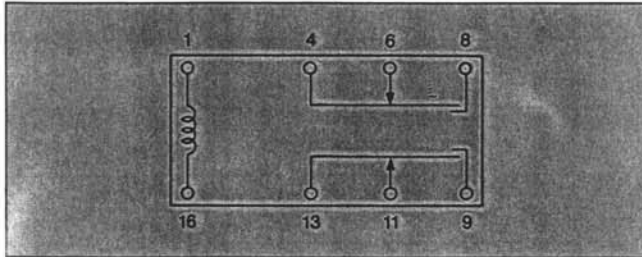
	Description	Specification	Remarks
Coil	Nominal power consumption	150 mW	
	Operating power consumption	75 mW	
	Ambient temperature	-30 to +90°C	
Contact	Arrangement	DPDT (2 form C), bifurcated	
	Material	Au-overlaid Ag-Pd alloy	
	Circuit resistance	60 mΩ or less	Initially
	Max. switching power	30 W or 50 VA	Resistive load
	Max. switching voltage	150 Vdc or 220 Vac	Resistive load
	Max. carrying current	2A	
Electrical characteristics	Max. operate time	7ms (8ms: SW-48B)	Nominal voltage
	Max. release time	4 ms (6ms: SW-48B)	Nominal voltage
	Max. bounce time	2 ms at operate, 6 ms at release	Nominal voltage
	Insulation resistance	1000 MΩ or more at 500 Vdc	20 ± 15°C, 65 ± 15% RH
	Dielectric strength	Open contacts: 1300 Vdc; Others 1600 Vdc	1 minute
	Surge voltage	Open contacts: 1500 V (10 × 1000 μs) Others: 2500 V (10 × 1000 μs)	
Capacitance between open contacts	Approx. 2pF		
Life expectancy	Electrical endurance	2 × 10 ⁶ operations (20 mVac, 1 mA)	Resistive load
		2 × 10 ⁶ operations (20 Vdc, 20 mA)	
		2 × 10 ⁶ operations (96 Vdc, 140 mA)	
		1 × 10 ⁵ operations (24 Vdc, 1.25 A)	
	1 × 10 ⁵ operations (150 Vac, 0.3 A)		
Mechanical endurance	2 × 10 ⁷ operations		
Shock resistance	Functional	10 G	IEC 68-2-27
	Breakage	100 G	
Vibration resistance	Functional	10 to 55 Hz (Double amplitude 1.5 mm)	IEC 68-2-6
	Breakage	10 to 55 Hz (Double amplitude 4.0 mm)	
Coil temperature rise		14°C	Nominal voltage
Mass		Approx. 4g	



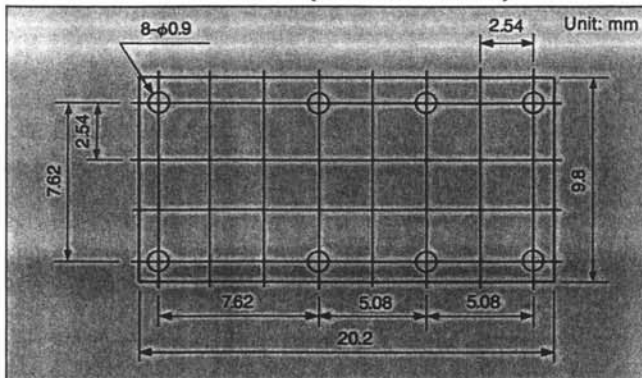
DIMENSIONS



PIN CONFIGURATION (Bottom View)



PC BOARD LAYOUT (Bottom View)



NOTES

1. Power Supply

DC power is recommended because the electrical characteristics may vary according to the ripple factor.

2. Soldering

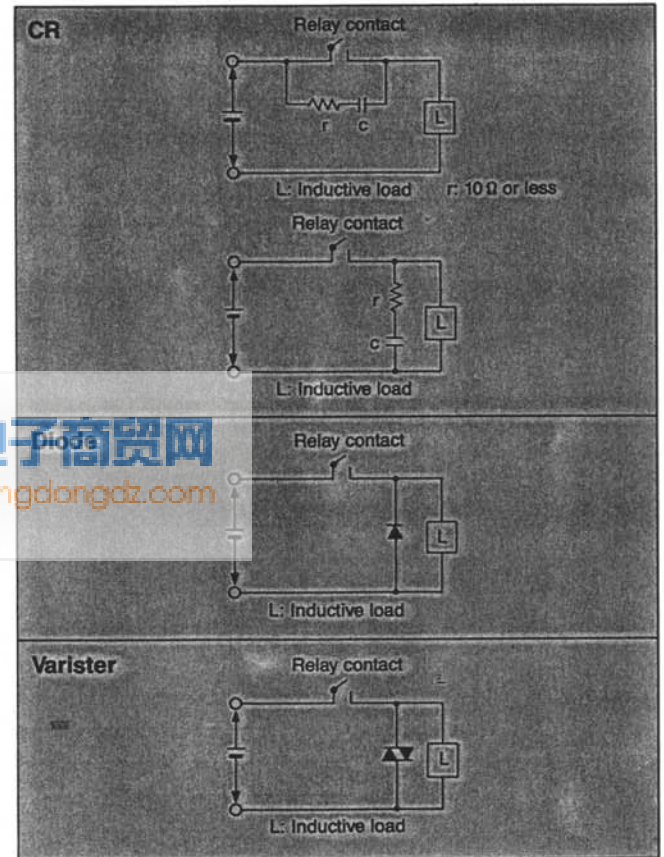
Soldering must be performed at 260°C, within 5 seconds.

3. Cleaning

Alcohol solvents are recommended, but ultrasonic cleaning should be avoided.

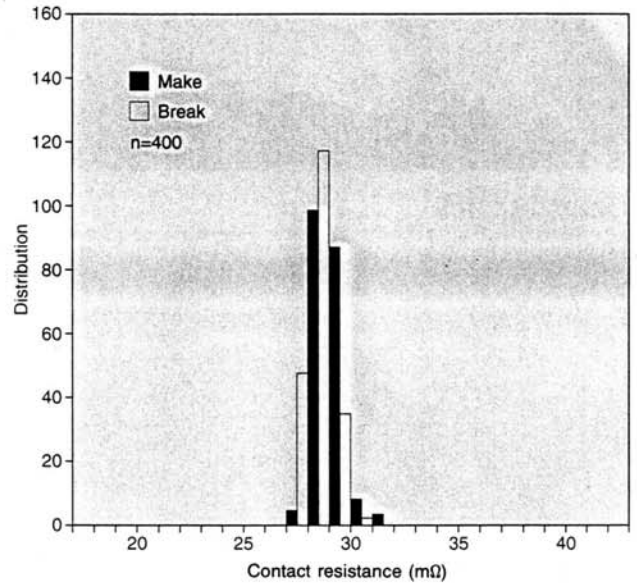
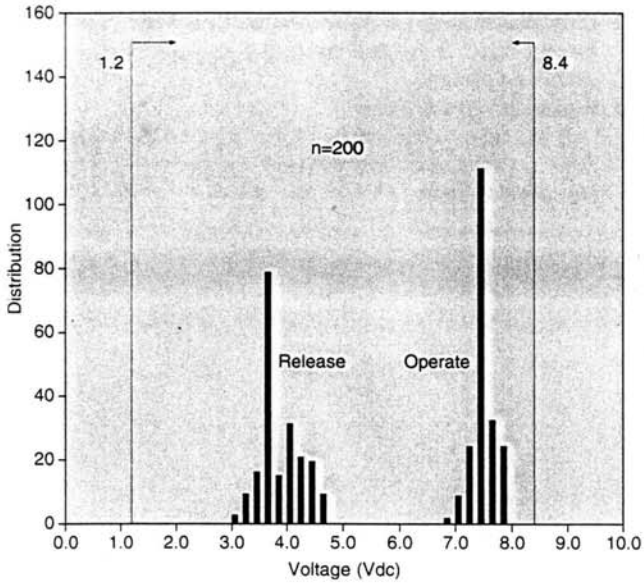
4. Protection of Contacts

Use SW relay within contact switching ratings in case of inductive load switching, the following protective measures are recommended.



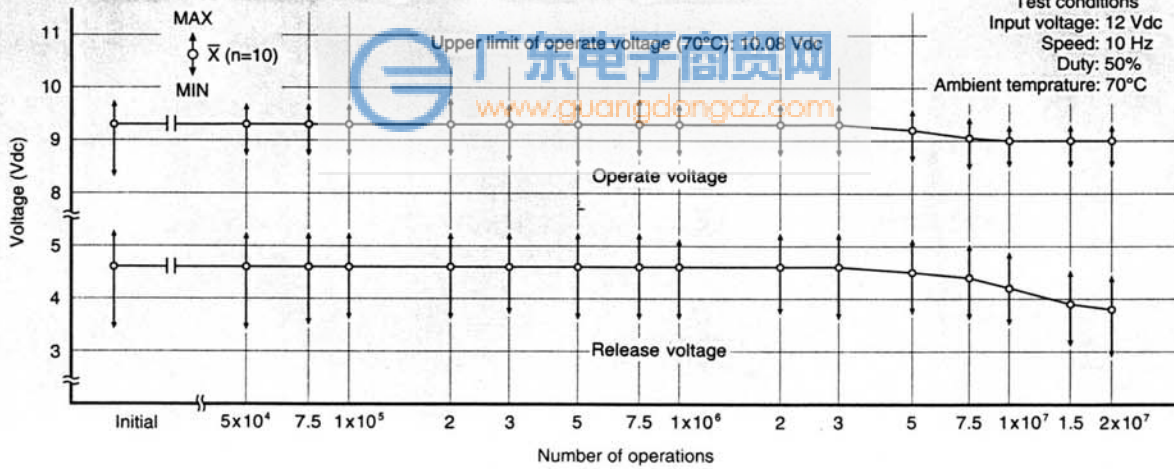
DATA (Tested Samples: SW-12)

INITIAL DISTRIBUTION



MECHANICAL ENDURANCE

Operate and release voltages vs. Number of operations



Contact resistance vs. Number of operations

