

FEATURES

- High sensitivity, 75mW pick-up
- High dielectric strength, (SVRB: 1500Vac)
- Low profile, 20.2(L) × 9.8(W) × 12.5(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
- UL, CSA approved

STANDARD TYPE

SVR (Low Power Consumption)

Type	Nominal voltage (Vdc)	Coil resistance (Ω at 20°C)	Operate voltage	Release voltage	Nominal power consumption (mW)
			(Vdc at 20°C)		
SVR-4.5	4.5	135 ± 10%	3.2	0.45	150
SVR-5	5	167 ± 10%	3.5	0.5	150
SVR-6	6	240 ± 10%	4.2	0.6	150
SVR-9	9	540 ± 10%	6.3	0.9	150
SVR-12	12	960 ± 10%	8.4	1.2	150
SVR-24	24	3200 ± 10%	16.8	2.4	180
SVR-24A	24	2880 ± 10%	16.8	2.4	200
SVR-24B	24	3840 ± 10%	16.8	2.4	150
SVR-48	48	12000 ± 10%	33.6	4.8	192
SVR-48B	48	15360 ± 10%	33.6	4.8	150
SVR-48E	48	7680 ± 10%	33.6	4.8	300

SVRA

SVRA-5	5	50 ± 10%	3.5	0.23	500
SVRA-12	12	280 ± 10%	8.4	0.55	510
SVRA-24	24	1050 ± 10%	16.8	0.98	550
SVRA-48	48	4100 ± 10%	33.6	1.92	560

SVRB (High Dielectric Strength)

SVRB-5	5	71 ± 10%	3.5	0.37	350
SVRB-12	12	410 ± 10%	8.4	0.90	350
SVRB-24	24	1650 ± 10%	16.8	1.80	350
SVRB-48	48	6580 ± 10%	33.6	3.60	350

Note: Other types for nominal voltage and coil resistance are available.

勝特力材料 886-3-5753170

勝特力电子(上海) 86-21-54151736

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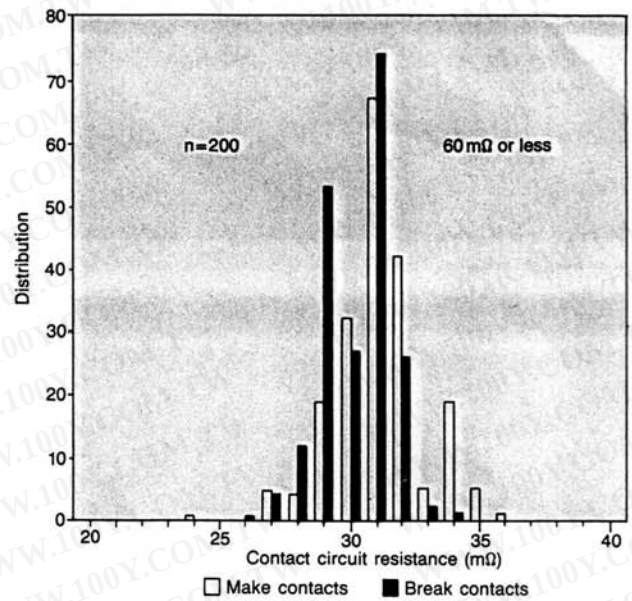
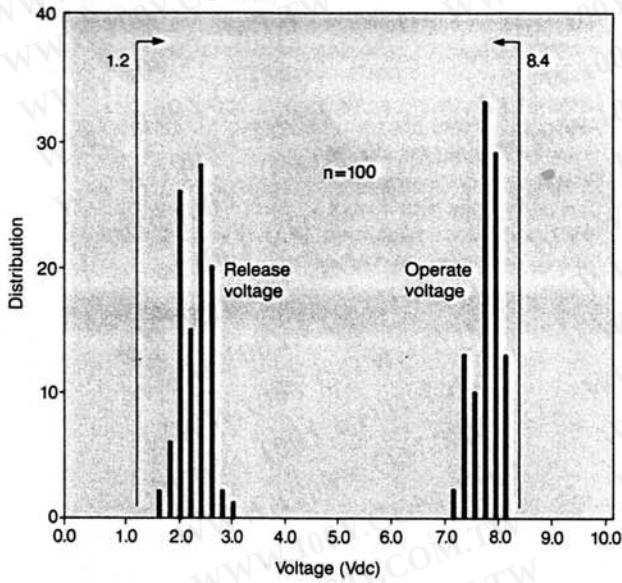
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SPECIFICATIONS

	Description	Specification	Remarks
Coil	Nominal power consumption	150 mW (SVR), 350 mW (SVRB), 500 mW (SVRA)	
	Operating power consumption	75 mW (SVR), 172 mW (SVRB), 245 mW (SVRA)	
	Ambient temperature	-30 to +90°C (SVR), -30 to +80°C (SVRB), -30 to +70°C (SVRA)	
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	2 A	
Electrical characteristics	Max. operate time	6 ms (7 ms: SVR-48B, SVRB-48)	Nominal voltage
	Max. release time	4 ms (6 ms: SVR-48B, SVRB-48)	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: 750 Vac (SVR, SVRA) 1500 Vac (SVRB)	1 minute
		Others: 1000 Vac (SVR, SVRA) 1500 Vac (SVRB)	
	Surge voltage	Open contacts: 1000 V (10 × 1000 μS) (SVR, SVRA) 2000 V (10 × 1000 μS) (SVRB)	
		Others: 1500 V (10 × 1000 μS) (SVR, SVRA) 2500 V (10 × 1000 μS) (SVRB)	
	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	
	Breakage	100 G	
Vibration resistance	Functional	10 to 55 Hz (Double amplitude 1.5 mm)	IEC68-2-6
	Breakage	10 to 55 Hz (Double amplitude 4.0 mm)	
Coil temperature rise		Approx. 14°C (SVR)	Nominal voltage
Mass		Approx. 5 g	

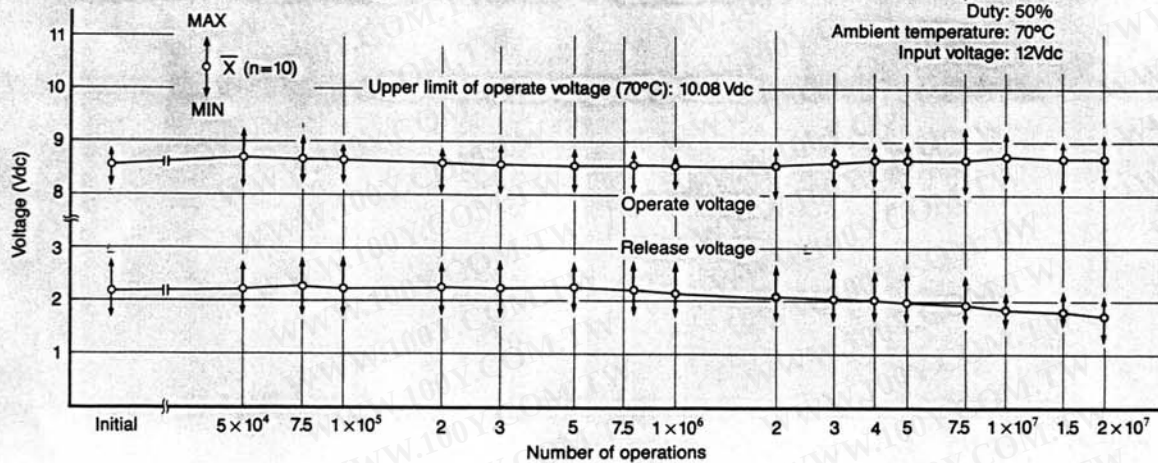
DATA (Tested Samples: SVR-12)

INITIAL DISTRIBUTION

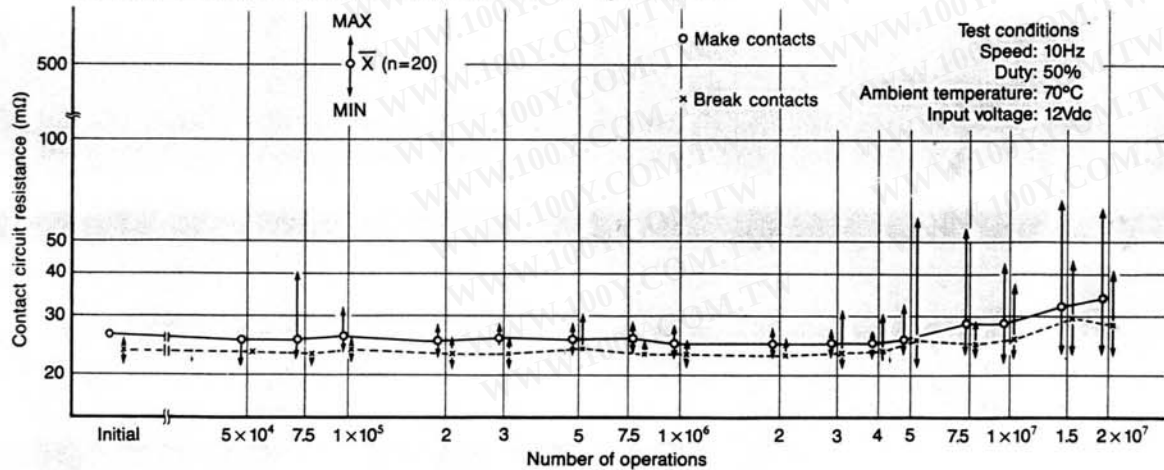


MECHANICAL ENDURANCE TEST

Operate and release voltages vs. Number of operations



Contact circuit resistance vs. Number of operations

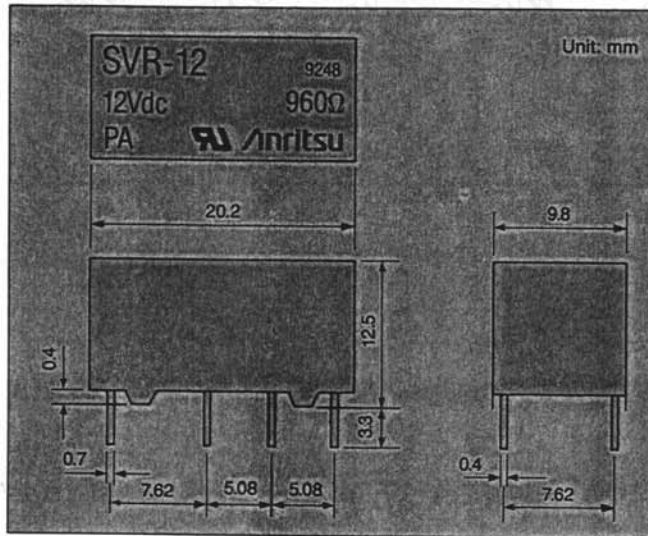


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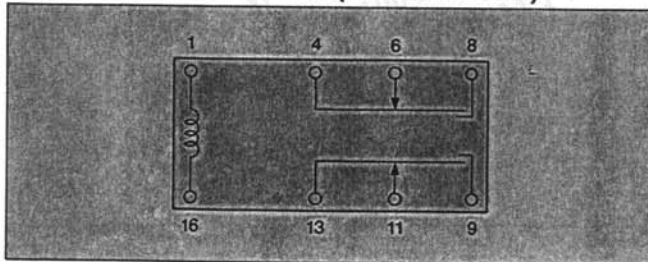
NOTES

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

DIMENSIONS



PIN CONFIGURATION (Bottom View)



PC BOARD LAYOUT (Bottom View)

