SANYOU RELAYS
Relays for advanced technology

SUBMINIATURE POWER RELAY

SRU-RELAYS

UL,C-UL File No.:E179745
TUV File No.:R99024354
CQC File No.:CQC02001002126

- High contact capacity : 15A
- Sealed types available
- Ultra-miniature size with universal terminal footprint
- Low coil power consumption.
- TV-5 rated types available

SPECIFICATIONS

Contact

Arrangement		1a, 1b, 1c
Contact material		Silver alloy
Contact resistance (By voltage drop 1A 6VDC)		50mΩ Max.
UL/C-UL rating Resistance load (cos ϕ =1)		TV-5 120VAC 15A 120VAC 12A 120VAC 10A 240VAC 10A 24VDC 7A 250VAC
Inductive load (cos ϕ =0.75~0.8)		4A 120VAC
TUV rating		10A 240VAC 10A 24VDC 7A 240VDC
CQC rating		10A 250VAC
Max.switching voltage		250VAC 24VDC
Max.switching current		15A
Max.switching power		2,400VA 240W
Expected life(min.ope)	Mechanical (at 180 cpm)	$1X10^7$
	Electrical (at 20 cpm)	$1X10^5$

Coil

Nominal operating power	0.36W, 0.45W

Characteristics

Operate time		15 msec.Max.
Release time		5 msec.Max.
Operating humidity		45~85%RH
Initial breakdown voltage	Between contact and coil	1,500VAC (50/60Hz) for 1 min.
	Between open contacts	1,000VAC (50/60Hz) for 1 min.
Insulation resistance		100MΩ Min.(500VDC)
Ambient temperature		-40℃~+85℃
Temperature rise (Max.)		35℃
Shock resistance	Functional	10G Min.
	Destructive	100G Min.
Vibration resistance	Functional	10 TO 55 Hz at double Amplitude of 1.5mm
	Destructive	10 TO 55 Hz at double Amplitude of 1.5mm
Unit weight		Approx. 12g

TYPICAL APPLICATIONS

1. Domestic appliances.
2. Office machines.
3. Audio equipment.
4. Coffee pots.
5. Remote control TV receivers.
6. Car control unit,etc.

ORDERING INFORMATION

SRU — S — 1 | 12 | D | M

Type	Protective construction	Number of poles	Coil voltage	Coil sensitivity	Contact form
SRU	NIL:Flux type S:Sealed type	1:1 pole	03,05,06,09, 12,18,24,48	D:0.45W L:0.36W	M:1 Form A B:1 Form B Nil:1 Form C

COIL(at 20°C)

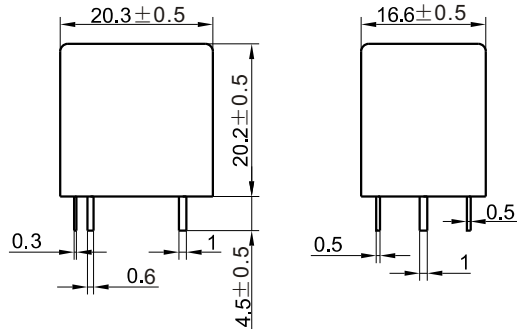
SRU

Voltage code	Nominal voltage (VDC)	Nominal current (mA)	Coil resistance (Ω ±10%)	Drop-out voltage (VDC)	Pick-up voltage (VDC)	Nominal operating power (W)	Max allowable voltage (VDC)
03	3	150.00	20	5%Min.	75%Max.	0.45	130% of nominal voltage
05	5	89.28	56				
06	6	75.00	80				
09	9	50.00	180				
12	12	37.50	320				
18	18	20.00	720				
24	24	18.75	1,280				
48	48	9.38	5,120				

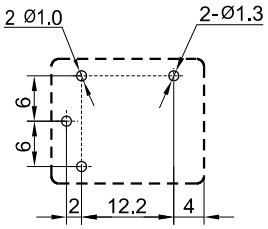
Voltage code	Nominal voltage (VDC)	Nominal current (mA)	Coil resistance (Ω ±10%)	Drop-out voltage (VDC)	Pick-up voltage (VDC)	Nominal operating power (W)	Max allowable voltage (VDC)
03	3	150.00	25	5%Min.	75%Max.	0.36	130% of nominal voltage
05	5	71.42	70				
06	6	75.00	100				
09	9	50.00	225				
12	12	37.50	400				
18	18	20.00	900				
24	24	20.87	1,600				
48	48	9.38	6,400				

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT(unit:mm)

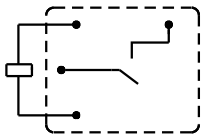
1A



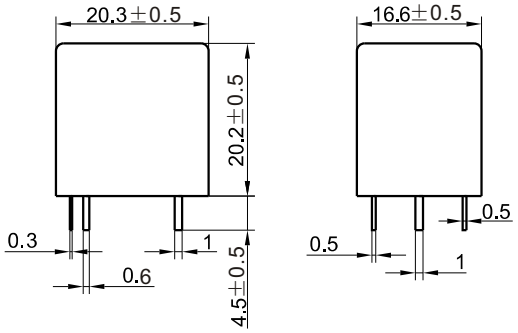
PCB layout

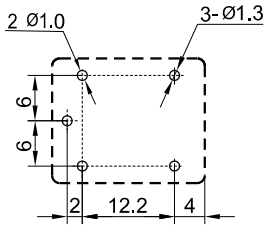


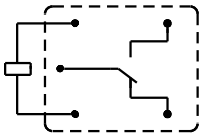
Wiring Diagram



1C

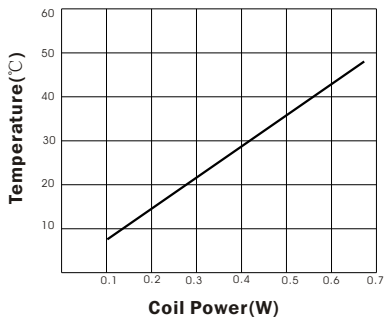






CHARACTERISTICS CURVE

COIL TEMPERATURE RISE



LIFE CURVE