

## SMI-S-1 SERIES SPECIFICATION SHEET

### TYPICAL APPLICATIONS

- |                       |                        |                              |
|-----------------------|------------------------|------------------------------|
| 1. Cooking appliances | 3. Audio equipment     | 5. Industrial equipment etc. |
| 2. Air conditioner    | 4. Domestic appliances |                              |



UL,C-UL File No.:E179745  
 TUV File No.:R50038852/1  
 CQC File No.:CQC02001002124

- Miniature package with universal terminal footprint P.C. board technique.
- High dielectric withstanding for transient protection. 10,000 V surge in msec between coil and contact.

### SPECIFICATIONS

#### Contact

Arrangement	1a, 1c	
Contact material	Silver alloy	
Contact resistance (By voltage drop 1A 6VDC)	50 mΩ Max.	
UL/C-UL rating		
Resistance load (cos φ = 1)	10A	250VAC
	10A	30VDC
Inductive load (cos φ = 0.75-0.8)	5A	250VAC
TUV rating	10A	250VAC
	10A	30VDC
CQC rating	10A	250VAC
Max.switching voltage	250VAC 30VDC	
Max.switching current	10A	
Max.switching power	2,500VA 300W	
Expected life(min.ope)	Mechanical (at 180 cpm)	1X10 <sup>7</sup>
	Electrical (at 20 cpm)	1X10 <sup>5</sup>

#### Characteristics

Item	Type	SMI-D	SMI-L
Operate time		15 msec. Max.	20 msec. Max.
Release time		8 msec. Max.	
Operating humidity		45-80% RH	
Initial breakdown voltage	Between contact and coil	5,000VAC (50/60Hz) for 1 min.	
	Between open contacts	1,000VAC (50/60Hz) for 1 min.	
Ambient temperature		-40℃ ~ +85℃	
Insulation resistance		10,000V (between coil contacts)	
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	
Temperature rise (Max.)		45℃	35℃
Unit weight		Approx. 14g	

#### Coil

Nominal operating power	0.54W, 0.72W
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### ORDERING INFORMATION

Type	Protective construction	Number of poles	Coil voltage	Coil sensitivity	Contact form
SMI	NIL:Flux type S:Sealed type	1:1 pole	03,05,06,09, 12,18,24,48	D:0.72W L:0.54W	M:1 Form A Nil:1 Form C



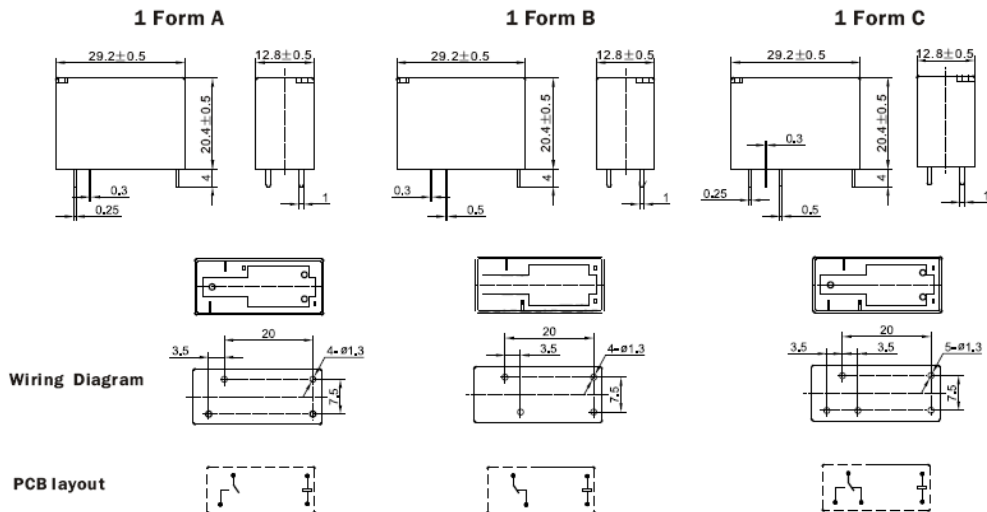
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**COIL(at 20°C)**

Type	Voltage code	Nominal voltage (VDC)	Nominal current (mA)	Coil resistance ( $\Omega \pm 10\%$ )	Drop-out voltage (VDC)	Pick-up voltage (VDC)	Nominal operating power (W)	SMI-1P
								Max allowable voltage (VDC)
SMI-D	03	3	240.00	12.5	5%Min.	80%Max.	0.72	130% of nominal voltage
	05	5	138.89	36				
	06	6	120.00	50				
	09	9	80.35	112				
	12	12	60.00	200				
	18	18	40.00	450				
	24	24	29.27	820				
	48	48	14.55	3,300				
SMI-L	03	3	176.47	17	5%Min.	80%Max.	0.54	130% of nominal voltage
	05	5	108.00	47				
	06	6	88.24	68				
	09	9	60.00	150				
	12	12	44.44	270				
	18	18	30.00	600				
	24	24	21.82	1,100				
	48	48	10.91	4,400				

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



**CHARACTERISTICS CURVE**

