



### Features

- High switching capability: 16A.
- Small size for density PCB mounting.
- Dielectric strength: 5000V.

### Safety Approval

UL, C-UL File No.: E190598

TUV File No.: R50143451

CQC File No.: CQC07001018779

### Contact Capacity

Model	SZ-DM & LM	SZ-D & L
Nominal switching capacity (res. load)	16A 250VAC	NO/NC: 16A/10A 250VAC
Max. switching current	20A	16A
Max. switching voltage	250VAC	250VAC
Max. switching power	4,000VA	4,000VA

### Charateristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	50mΩ Max.	
Operate time (at nominal volt.)	20msec. Max.	
Release time (at nominal volt.)	8msec. Max.	
Initial insulation resistance	1,000MΩ Min.(DC500V)	
Initial dielectric strength	Between open contacts: AC1,000V, 50/60Hz 1Min.	
	Between coil and contact: AC5,000V, 50/60Hz 1Min.	
Vibration resistance	Functional	10 ~ 55Hz at double amplitude of 1.5 mm
	Destructive	10 ~ 55Hz at double amplitude of 1.5 mm
Shock resistance	Functional	10G Min.
	Destructive	100G Min.
Endurance (operations)	Mechanical (at 7,200 ops./h)	10,000,000
	Electrical (at 900 ops./h)	100,000
Ambient temperature	-40°C ~ +105°C (no condensation)	
Unit weight	Approx. 12.8 g	

### Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current ± 10% (mA)	Coil resistance ± 10% (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
3	240.00	12.5	130 % of nominal voltage	80 % of nominal voltage	5 % of nominal voltage	Approx. 0.72W
5	144.00	36				
6	120.00	50				
9	80.00	112				
12	60.00	200				
18	40.00	450				
24	30.00	820				
48	14.50	3,300				

### Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current ± 10% (mA)	Coil resistance ± 10% (Ω)	Max. allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
3	180.00	17	130 % of nominal voltage	80 % of nominal voltage	5 % of nominal voltage	Approx. 0.54W
5	108.00	47				
6	90.00	68				
9	60.00	150				
12	45.00	270				
18	30.00	600				
24	22.50	1,100				
48	10.90	4,400				

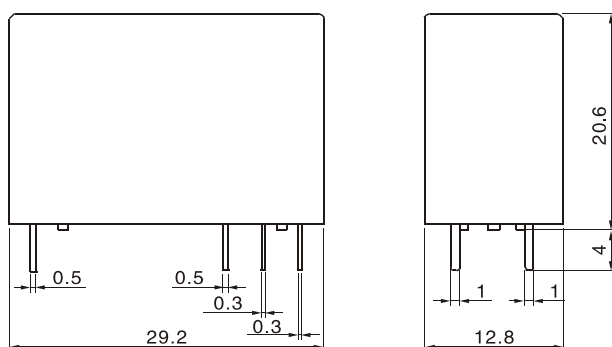
### Safety Approval Ratings

Approval	CQC	TUV	UL/CUL
File No.	CQC07001018779	R50143451	E190598
Approved ratings	16A 250VAC	Form A: 16A 250VAC 16A 30VDC Form C: 16A/10A 250VAC 16A/10A 30VDC	20A 120VAC, Resistive 16A 240VAC, Resistive 16A 240VAC, General Use, N.O. 5A 120VAC, General Use 5A 24VDC, Resistive 1HP 240VAC 1/2HP 120VAC, N.C. TV-8 240VAC, N.O. TV-3 240VAC, N.C. Pilot duty: 720VA 240VAC, N.O. 240VA 240VAC, N.C.

### Ordering Information

Nomenclature	
SZ -S -1 12 D M 1 - F -XX	Special Parameter: Nil-Standard type, Letter or number-Special requirement
	Insulation System: Nil-Standard, B-Class B, F-Class F
	Contact Material: Nil-AgSnO <sub>2</sub> , 1-AgCdO
	Contact Form: Nil-Form C, M-Form A
	Coil Power: D-0.72W, L-0.54W
	Coil Voltage (VDC): 03, 05, 06, 09, 12, 18, 24, 48
	Number of Poles: 1-1 Pole
	Protective Construction: S-Flux proofed, SH-Sealed type washable
	Type Designation: SZ

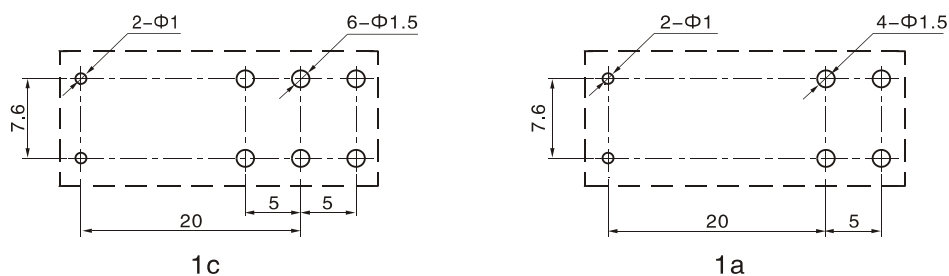
### Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit: mm)



Unless otherwise specified:  
 If dimension < 1mm, tolerance: ± 0.2mm;  
 If dimension 1~5mm, tolerance: ± 0.3mm;  
 If dimension > 5mm, tolerance: ± 0.4mm.  
 Note: 1. Extended terminal dimension is dimension before soldering.  
 2. Tolerance of P.C.B. layout: ± 0.1mm.



Wiring Diagram (bottom view)



P.C.B. Layout (bottom view)

## Typical Applications

- Home appliances, air conditioner, microwave oven, audio equipment, monitor, industrial control equipment, instrument, etc.

## Characteristic Curves

