

Features

- Small size for density PCB mounting.
- Dielectric strength : 5000V.

Safety Approval

UL , C-UL File No. : E190598

TUV File No. : R50143452

CQC File No. : CQC07001018779

Contact Capacity

Model	SMI -1 Pole	SMI -2 Poles
Nominal switching capacity (res. load)	12A 277VAC/10A 250VAC	8A 277VAC/5A 250VAC
Max. switching current	12A	8A
Max. switching voltage	277VAC	277VAC
Max. switching power	3,324VA	2,216VA

Characteristic Data

Contact material	Silver alloy	
Initial contact resistance (at 6VDC 1A)	100mΩ Max.	
Operate time (at nominal volt.)	SMI-D : 15msec. Max.	SMI-L : 20msec. Max.
Release time (at nominal volt.)	8msec. Max.	
Initial insulation resistance	1,00MΩ 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	100G Min.
	Destructive	10G Min.
Endurance (operations)	Mechanical (at 10,800 ops./h)	10,000,000
	Electrical (at 1,800 ops./h)	100,000
Ambient temperature	-40°C ~ +105°C (no condensation)	
Unit weight	Approx. 13.5 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	35				
6	120.00	50				
9	80.00	115				
12	60.00	200				
18	40.00	450				
24	30.00	820				
48	15.00	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	46				
6	90.00	67				
9	60.00	150				
12	45.00	267				
18	30.00	600				
24	22.50	1,067				
48	11.25	4,267				

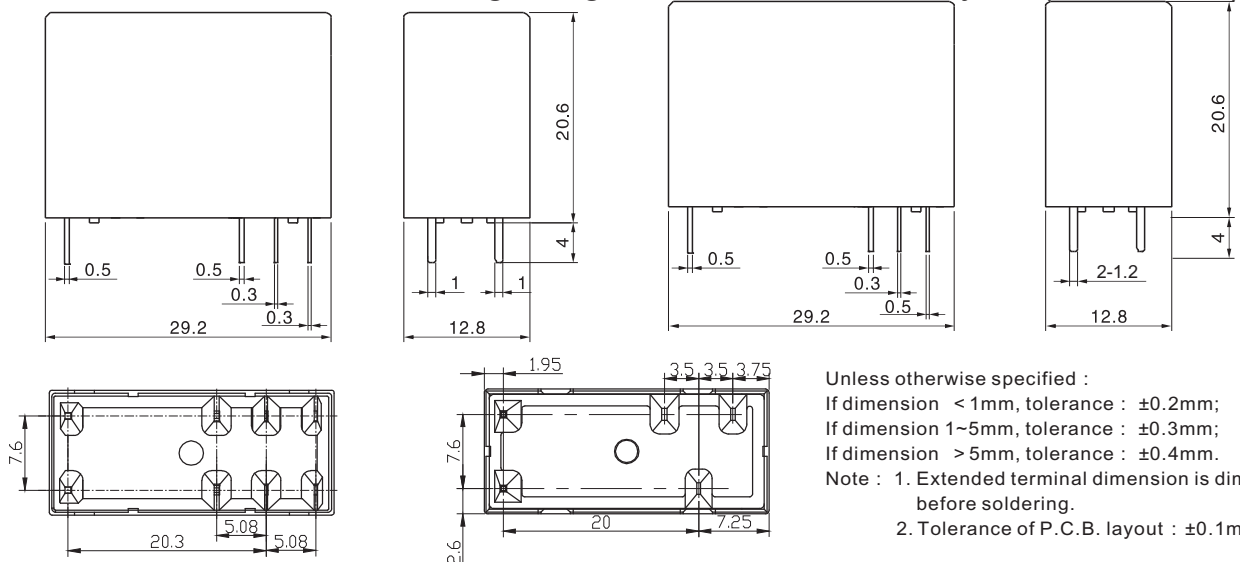
Safety Approval Ratings

Approval	CQC	TUV	UL/CUL	
File No.	CQC07001018779	R50143452	E190598	
Approved ratings	1 pole : 10A 250VAC 12A 277VAC N.O 8 A 277VAC N.C 2 poles : 5A 250VAC 5A 277VAC N.C 8A 277VAC N.O	1 pole : 10A 250VAC 10A 30VDC 2 poles : 5A 250VAC 5A 24VDC	1 Pole : 10A 250VAC , Resistive 10A 250VAC , General Use 5A 250VAC , General Use 10A 30VDC , Resistive TV-3 250VAC , N.O. TV-2 250VAC , N.O. Pilot duty: 250VA 250VAC 12A 277VAC.General Use &Resistive N.O. 8A 277VAC.General Use &Resistive N.C.	2 Poles : 5A 250VAC , Resistive 5A 250VAC , General Use 2A 120VAC , General Use 2A 240VAC , General Use 5A 24VDC , Resistive Pilot duty: 125VA 250VAC TV-3 120VAC N.O. 8A 277VAC.General Use &Resistive N.O. 5A 277VAC.General Use &Resistive N.C.

Ordering Information

Nomenclature	
SMI - S - 1 12 D M 1 - F - XX	Special Parameter : Nil-Standard type, Letter or number-Special requirement 01-new structure
	Insulation System : Nil-Standard, B-Class B, F-Class F
	Contact Material : Nil-AgSnO ₂ , 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, 2-2 Poles
	Protective Construction : S-Flux proofed, SH-Sealed type washable
	Type Designation : SMI

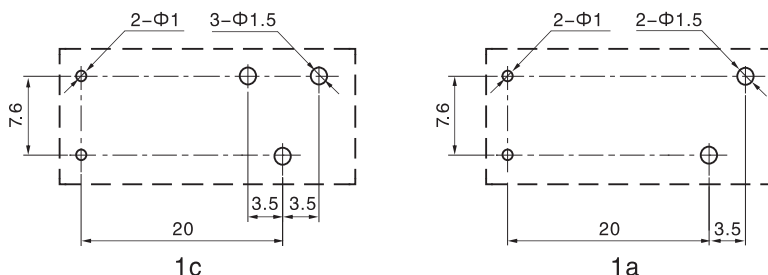
Outline Dimensions, Wiring Diagram, P.C. Board Layout(unit : mm)



Wiring Diagram (bottom view)



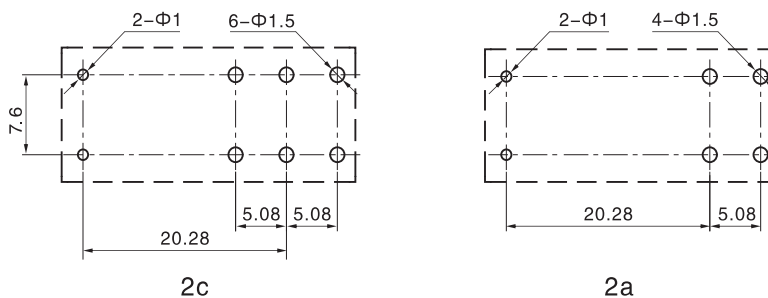
P.C.B. Layout (bottom view)



Wiring Diagram (bottom view)



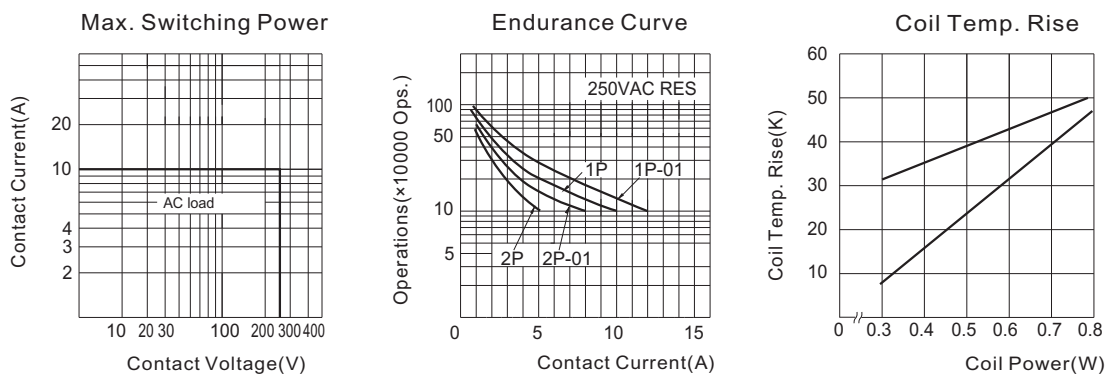
P.C.B. Layout (bottom view)



Typical Applications

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

Characteristic Curves



Disclaimer:

This datasheet is the customers' reference. All the specification are subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should in a right position to choose the suitable product for their own application. If there is any query, please contact Sanyou for the technical service. However it is the user's responsibility to determine which product should be used only.