



Miniature High Power Relay

Features

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

Safety Approval

UL, C-UL File No.: E179745

TUV File No.: R50148605

CQC File No. : CQC05001014267

Contact Capacity

Model	SMHE
Nominal switching capacity (res. load)	16A 277VAC
Max. switching current	16A
Max. switching voltage	277VAC
Max. switching power	4,432VA

Characteristic Data

Contact material	Silver alloy			
Initial contact resistance (at 6VDC 1A)	100mΩ Max.(1A 6VDC)			
Operate time (at nominal volt.)	20msec. Max.(no diode)			
Release time (at nominal volt.)	10msec. Max.(no diode)			
Initial insulation resistance	1000MΩ Min.(DC500V)			
Initial dielectric strength	Between open contacts: AC1,000V, 50/60Hz 1Min.			
	Between coil and contact :AC5,000V, 50/60Hz 1Min.			
	Functional	10~55Hz at double amplitude of 1.5 mm		
Vibration resistance	Destructive	10~55Hz at double amplitude of 1.5 mm		
Shock resistance	Functional	10G Min.		
Shock resistance	Destructive	100G Min.		
Endurance	Mechanical (at 7,200 ops./h)	10,000,000(at room temperature)		
(operations)	Electrical (at 360ops./h)	100,000(at room temperature)		
Ambient temperature	-40°C ~ +85°C (no condensation)			
Unit weight	Approx. 15.8 g			

Coil Data (at 20°C)

Nominal voltage (VDC)	Nominal operating current 1 0% (mA)	Coil resistance 1 0% (Ω)	.Max allowable voltage	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
5	100.00	50			, , , , , , , , , , , , , , , , , , ,	
6	83.33	72				
9	55.56	162	162 130 % of	75% of	5 % of	.Approx
12	41.67	288 nominal	nominal	nominal		
18	27.78	648	voltage	voltage	voltage	0.5W
24	20.83	1,152				
48	10.42	4,608				

SMHE-Series

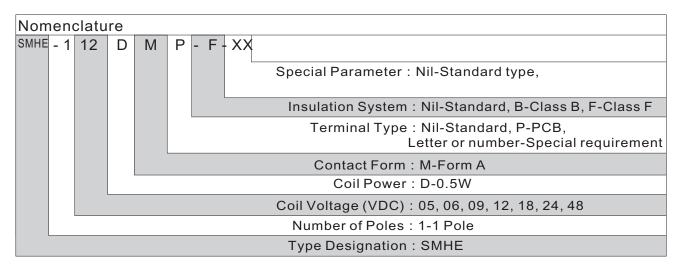
Safety Approval Ratings

Approval	CQC	TUV	UL/CUL	
File No.	CQC05001014267	R50148605	E179745	
Approved ratings	16A 277VAC	16A 277VAC 16A 30VDC	16A 277VAC , Resistive	

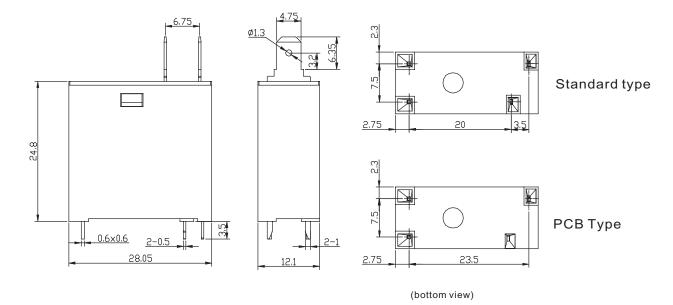
(1) The above-mentioned unspecified temperature ratings, means that the ambient temperature is room temperature.
(2) Only some typical ratings are listed above. Each rating's test condition is different, so the electrical endurance will be different. If more details are required, please contact us.

(3) For sealed type testing, please open the ventilation hole of case before test.

Ordering Information



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

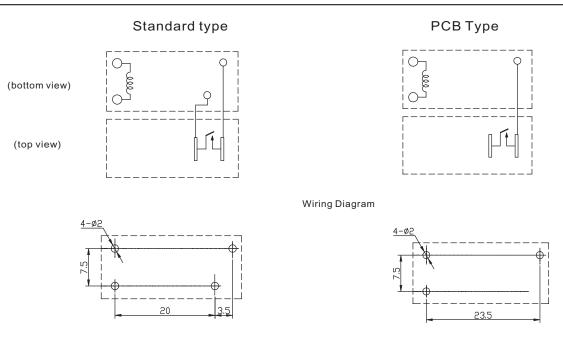


Unless otherwise specified :

- If dimension < 1mm, tolerance : 0.2mm;
- If dimension 1~5mm, tolerance: 0.3mm;
- If dimension >5mm, tolerance : 0.4mm.

2. Tolerance of P.C.B. layout : 0 .1mm.

Note: 1. Extended terminal dimension is dimension before soldering.

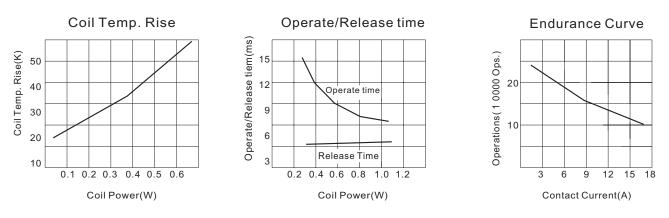


P.C.B. Layout (bottom view)

Typical Applications

• Home appliances, microwave oven

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.

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