

SONGLE RELAY



RELAY ISO9002

SMIH



1. MAIN FEATURES

- Slim type and small occupying space can offer high density P.C.B. technique.
- Low coil power consumption type and general coil power consumption are prepared to comply with user's wide selections.
- Employment of suitable plastic materials to be applied to high temperature and various chemical solutions.
- Complete protective construction from dust and soldering flux. If required, plastic epoxy resin sealed type is available for washing procedure.

2. APPLICATIONS

- Cooking appliances, air conditioners, audio equipment, domestic appliances, etc.

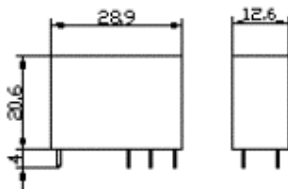
3. ORDERING INFORMATION

SMIH	XX VDC	S	L	C
Model of relay	Nominal coil voltage	Structure	Coil sensitivity	Contact form
SMIH	05, 06, 09, 12, 24, 48VDC	S: Sealed type	L: 0.54W	A: 1 form A
		F: Flux free type	D: 0.72W	B: 1 form B
				C: 1 form C

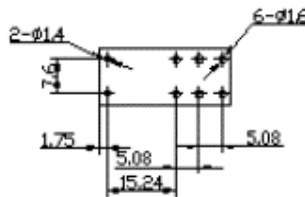
4. RATING

CCC	FILE NUMBER: CH0036746-99	16A/250VDC
UL	FILE NUMBER: E167996	16A/240VAC 30VDC
TUV	FILE NUMBER: R9933789	16A/240VAC 30VDC

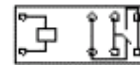
5. DIMENSION (unit:mm)



DRILLING (unit:mm)



WIRING DIAGRAM



6. COIL DATA CHART (AT20°C)

Coil Sensitivity	Coil Voltage Code	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω) $\pm 10\%$	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max-Allowable Voltage (VDC)
SMIH0.72W	03	03	240	12.5	abt. 0.72W	80% Max.	5% Min.	130% Max.
	05	05	138.9	36				
	06	06	120	50				
	09	09	78.3	115				
	12	12	60	200				
	24	24	29.3	820				
	48	48	14.5	3300				
SMIH0.54W	03	03	126.5	17	abt. 0.54W	80%Max.	5% Min.	130% Max.
	05	05	106.4	47				
	06	06	88	68				
	09	09	58	155				
	12	12	44.4	270				
	24	24	21.8	1100				
	48	48	10.9	4400				

7. CONTACT RATING

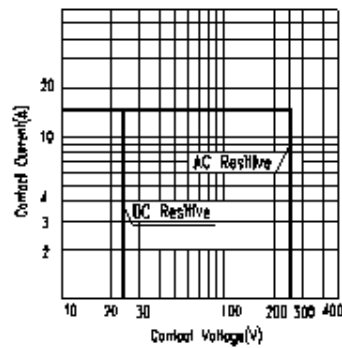
Item	Arrangement	SMIH	
Rated load		Resistive Load ($\cos\phi=1$)	Inductive Load ($\cos\phi=0.4$)
		16A 250VAC	7A 250VAC
		16A 30VDC	7A 30VDC
Carrying current		16A	
Max. switching voltage		450VAC, 200VDC	
Min. permissible load		5VDC 10mA	
Contact material		AgCdO	

8. PERFORMANCE (at initial value)

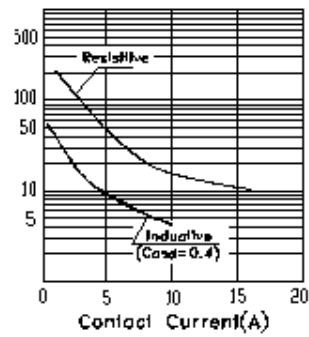
Item	Type	SMIH
Contact Resistance		100m Ω Max.
Operation Time		15msec Max.
Release Time		8msec Max.
Dielectric Strength		
Between coil & contact		5000VAC 50/60HZ (1 minute)
Between contacts		1000VAC 50/60HZ (1 minute)
Surge Resistiveness		1000V (between coil & contact 1×40 msec)
Insulation Resistance		100 M Ω Min. (500VDC)
Max. ON/OFF Switching		
Mechanically		300 operation/min
Electrically		30 operation/min
Operating Ambient Temperature		-20°C to +55°C
Operating Humidity		45 to 80% RH
Coil Temperature Rise		45 deg. Max.
		(at rated coil voltage)
Vibration		
Endurance		10 to 55Hz Double Amplitude 1.5mm
Error Operation		10 to 55Hz Double Amplitude 1.5mm
Shock		
Endurance		100G Min.
Error Operation		10G Min.
Life Expectancy		
Mechanically		10 ⁷ operations. Min.
Electrically		10 ⁵ operations. Min.
Weight		abt. 13grs.

9. USEFUL CURVES

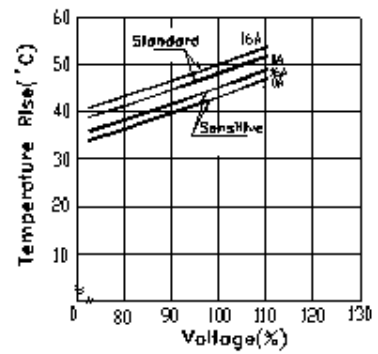
Maximum switching power



Life curve



Temperature rise



Made in china