

## Miniature PCB Power Relay

# HG4510

### FEATURES

- 20A switching capacity
- Withstand inrush current of 60A
- 10KV surge voltage between coil and contacts
- 8 mm creepage distance

### TYPICAL APPLICATIONS

- Air conditioners
- Heaters and refrigeration control
- Microwave oven

### CONTACT RATING

Form	1 Form A (H)
Resistive	20A, 250VAC

### UL/CSA RATING

Form	1 Form A (H)
Resistive	20A, 220VAC

### CONTACT DATA

Material	AgCdO	
Initial Contact Resistance	50 mΩ max. at 1A, 6VDC	
Max. Switching Current	20A	
Max. Switching Voltage	250VAC	
Max. Switching Power	5000VA	
Service Life	Mechanical	5 x 10 <sup>6</sup> ops.
	Electrical	10 <sup>5</sup> ops.

### COIL DATA

Coil Voltage Code	Nominal Voltage (VDC)	Resistance (Ω) ±10%		Must Operate Voltage max. (VDC)	Must Release Voltage min. (VDC)	Max. Allowable Voltage (VDC)
		Power Consumption				
005	5	27.8	0.9W	3.5	0.5	5.5
006	6	40		4.2	0.6	6.5
012	12	160		8.4	1.2	13.2
024	24	640		16.8	2.4	26.4
048	48	2560		33.6	4.8	52.8

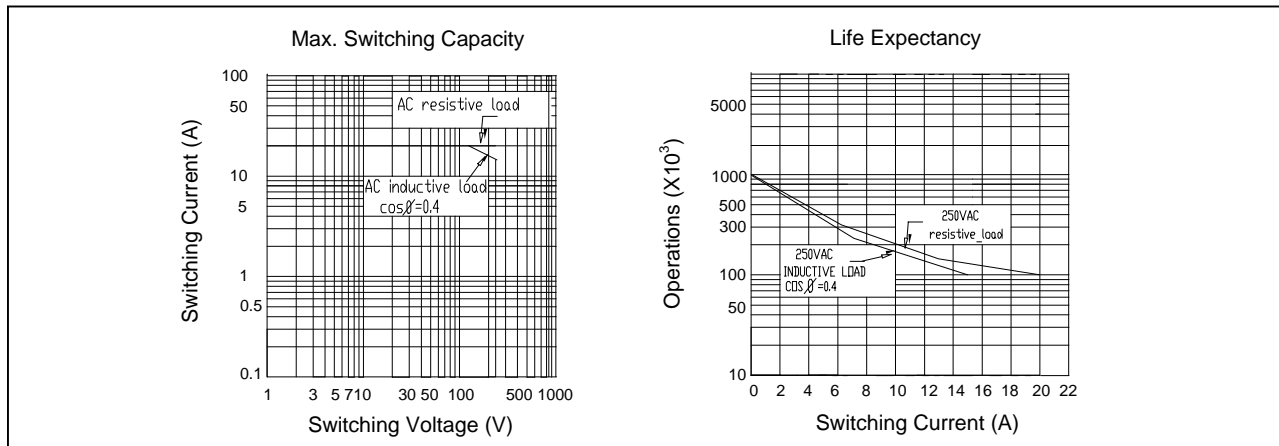
### CHARACTERISTICS

Operate Time	15 ms. max.
Release Time	10 ms. max.
Insulation Resistance	1000 MΩ, at 500 VDC, 50%RH
Dielectric Strength	2000 Vrms, 1 min. between coil and contacts 1000 Vrms, 1 min. between open contacts
Surge Voltage	10,000 V, between coil and contacts
Shock Resistance	20 g, 11ms. functional; 100g, destructive
Vibration Resistance	DA 1.5mm, 10 - 55 Hz
Ambient Temperature	-40°C to 55°C
Weight	42g, approx.

### ORDERING DESIGNATION

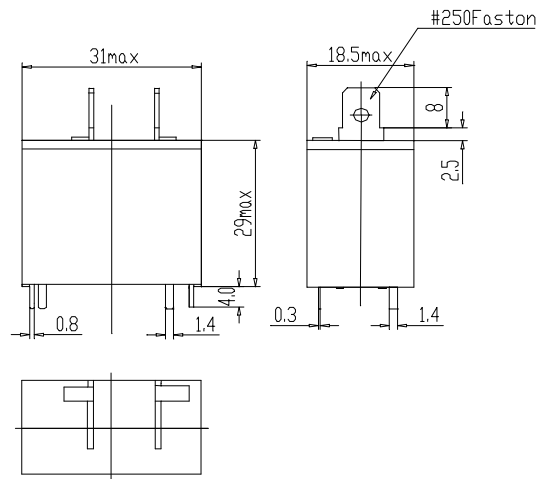
Example:	HG4510 /	012 -	H	1	C
Model					
Coil Voltage Code					
Contact Form					
H: 1 Form A					
Version					
1: Sealed					
Contact Material					
C: AgCdO					

### REFERENCE CURVE

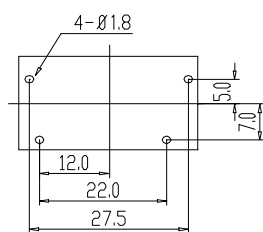


### OVERALL DIMENSIONS, MOUNTING HOLES AND WIRING DIAGRAM (mm)

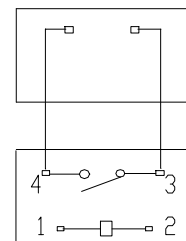
## Overall Dimensions



### Mounting Holes (Bottom View)



### Wiring Diagram



## NOTES

1. All parameters, unless otherwise specified, are measured at ambient temperature 23°C.
2. Custom-made services available with operational quantity. Please let us know your special requirements.
3. Specifications subject to change without prior notice.