HG4503

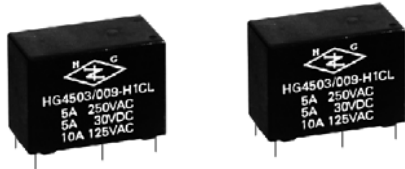### Subminiature PCB Power Relay

FEATURES

- 5A to 10A contact capacity
- Subminiature design
- 1 Form A, 1 Form C contact form
- Sealed and dust cover version for choice
- UL, CUR approved

TYPICAL APPLICATIONS

- Household appliances
- Office machine
- Vending machine
- Audio equipment

CONTACT RATING

Form	1 Form A (H), 1 Form C (Z)
Reted Load	5A, 250VAC/30VDC (NO) 10A, 125VAC (NO) 3A, 250VAC/30VDC (NC)

CONTACT DATA

Material		AgCdO
Initial Contact Resistance		100 mΩ max. at 1A, 24VDC
Service Life	Mechanical	10^7 ops.
	Electrical	10^5 ops.

COIL DATA

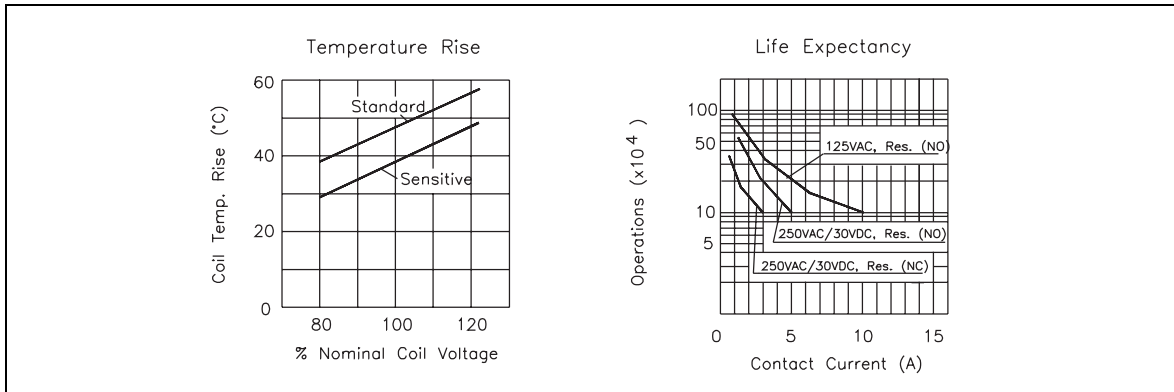| Coil Voltage Code	Nominal Voltage (VDC)	Resistance (Ω) ±10% Power Consumption				Must Operate Voltage max. (VDC)	Must Release Voltage min. (VDC)
		Standard		Sensitive			
003	3	20		45		2.25	0.15
005	5	55		125		3.75	0.25
006	6	80		180		4.50	0.30
009	9	180	0.45W	400	0.2W	6.75	0.45
012	12	320		720		9.00	0.60
018	18	720		1600		13.50	0.90
024	24	1280		2800		18.00	1.20

CHARACTERISTICS

Operate Time	8 ms.
Release Time	5 ms.
Insulation Resistance	1000 MΩ, at 500 VDC, 50%RH
Dielectric Strength	4000 Vrms, 1 min. between coil and contacts 1000 Vrms, 1 min. between open contacts
Shock Resistance	10 g, 11ms. functional; 100 g, destructive
Vibration Resistance	DA 1.6 mm, 10 - 55 Hz
Ambient Temperature	-40ºC to 70ºC
Weight	7 g, approx.

ORDERING DESIGNATION
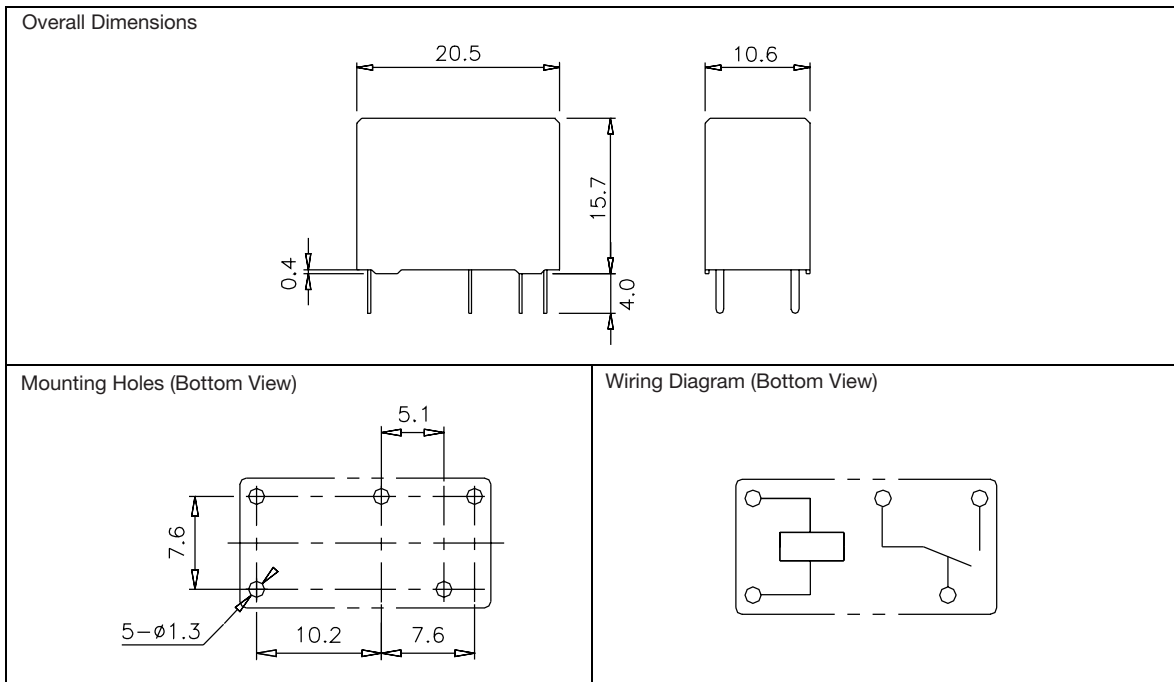
	Example:	HG4503 /	012 -	H	1	C	L

Model

Coil Voltage Code

Contact Form
H: 1 Form A
Z: 1 Form C

Version
1: Sealed, 2: Dust Cover

Contact Material
C: AgCdO; S: AgSnOInO

Coil Sensitivity
Nil: Standard 0.45W; L: Sensitive 0.2W*

*Note: Sensitive 0.2W (L) is only available for 1 Form A (H)

REFERENCE CURVES

Temperature Rise

Coil Temp. Rise (°C)

- Standard
- Sensitive

60
40
20
0

80   100   120

% Nominal Coil Voltage

Life Expectancy

Operations (x10^4)

100
50
10
5

- 125VAC, Res. (NO)
- 250VAC/30VDC, Res. (NO)
- 250VAC/30VDC, Res. (NC)

0   5   10   15

Contact Current (A)

OVERALL DIMENSIONS, MOUNTING HOLES AND WIRING DIAGRAM (mm)

Overall Dimensions

20.5   10.6
15.7
0.4   4.0

Mounting Holes (Bottom View)

5.1
7.6
5−ø1.3   10.2   7.6

Wiring Diagram (Bottom View)

NOTES

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