

# GSB. MININATURE POWER RELAY

## FEATURES

- ▶ 20.0 X 5.0 X 12.5(H) MM.
- ▶ UP TO 5A MAX SWITCHING CAPACITY.
- ▶ SLIM TYPE, HIGH SENSITIVE COIL, ONLY 0.12W.
- ▶ EXCELLENT FOR COMPLEX LOAD AND INDUSTRIAL CONTROL.
- ▶ UL CLASS F INSULATION AVAILABLE.



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## CONTACT RATINGS

Contact Form	1A
Contact Resistance	≤100mΩ (1A 6VDC)
Contact Material	Ag Alloy (AgSnO <sub>2</sub> , AgSnO <sub>2</sub> In <sub>2</sub> O <sub>3</sub> )
Rated Load (Resistive)	FORM A
	5A 277VAC 5A 30VDC
Max. Switching Current	5A
Max. Switching Power	1,385VA / 150W
Max. Switching Voltage	250VAC / 30VDC
Min. Permissible Load	10mA at 5VDC

## CHARACTERISTICS

Operate Time	≤ 10ms	
Release Time	≤ 5ms	
Insulation Resistance	1,000MΩ (500VDC)	
Dielectric Strength	I / O	O / O
	3,000VAC 1min	1,000VAC 1 min
Impulse Withstand Voltage	5 kV (1.2 x 50μs)	
Shock Resistance	Non-energized	Destruction
	100 m/s <sup>2</sup> (10G)	1,000 m/s <sup>2</sup> (100G)
Vibration Resistance	Destruction	
	10 to 55 Hz, (1.5mm double amplitude)	Malfunction
Ambient Temperature	Operating: -40°C to +105°C with no icing or condensation	
Ambient Humidity	Operating: 5% to 85%	
Pin Type	PCB Pins	
Weight	Approx. 3.5g	

NOTE: The data shown above are initial values.

## COIL DATA

Standard	Approx. 120mW to 180mW				
Rated Voltage (VDC)	Operate Voltage (VDC)	Release Voltage (VDC)	Max. Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω) ±10%
5	≤3.5	≥0.25	6	24	208
6	≤4.2	≥0.30	7.2	20	300
9	≤6.3	≥0.45	10.8	13.33	675
12	≤8.4	≥0.6	14.4	10	1,200
18	≤12.6	≥0.9	21.6	6.67	2,700
24	≤16.8	≥1.2	28.8	7.5	3,200

## LIFE EXPECTANCY DATA

Mechanical Life Expectancy	10,000,000 Operations
Electrical Life Expectancy	FORM A
	50,000 Operations (5A 250VAC Resistive Load, 1s ON / 9s OFF)
	10,000 Operations (5A 30VDC Resistive Load, 1s ON / 9s OFF)

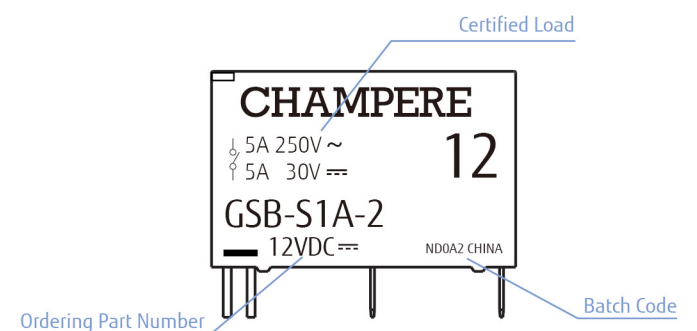
NOTE: The electrical life data items shown are possible at 23°C.

## PACKAGE INFORMATION

Inner Package Type & Quantity	50Pcs Per PVC Tray
Outer Package Type & Quantity	1,000pcs per Carton with Logo and Sticker
Outer Package Dimension & Weight G.W. / N.W.	35 x 23 x 20 cm; 5Kgs / 3.5Kgs

SIDE PRINTING

LASER PRINTING

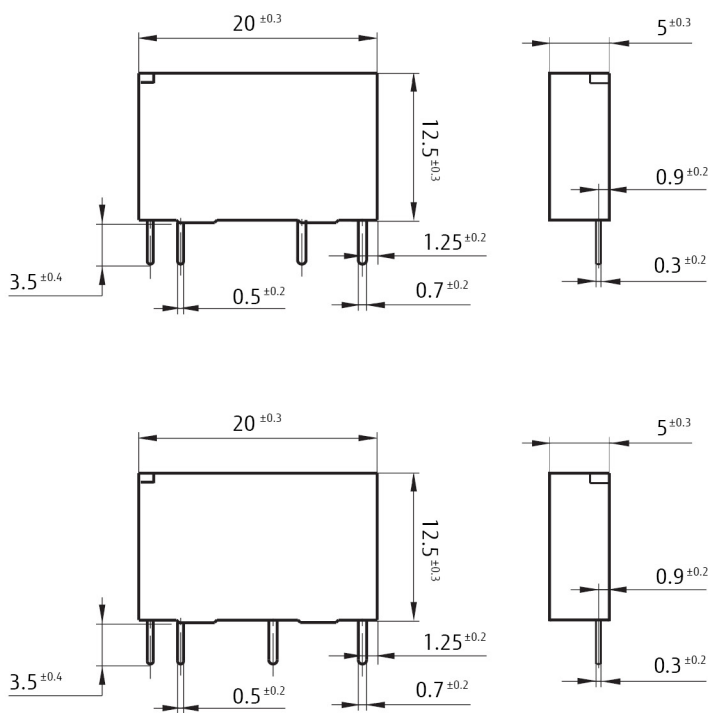


ORDERING INFORMATION

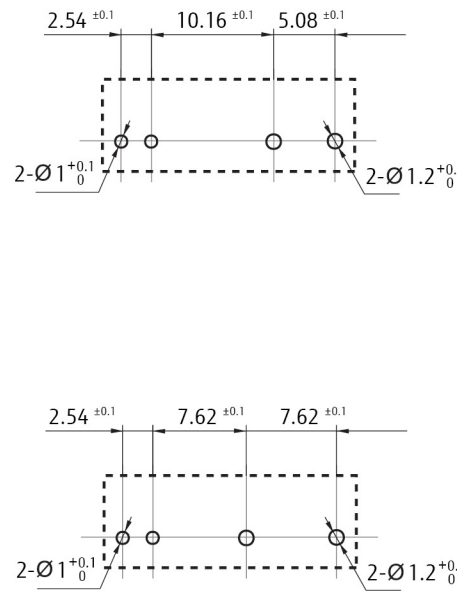
Type	Contact / Seal Key	Variation Key	Coil Key
GSB	S 1 A	F 2	24 VDC
Seal Type	Nil: Flux Proof; S: Plastic Sealed		X / XX: Coil DC Voltage Value <b>Coil Voltage</b>
NO of Pole	1: Single Pole		1: 5.08mm Pitch; 2: 7.62mm Pitch <b>Pin Type</b>
Contact Form	A: Form A / Normally Open		Nil: Standard Insulation; F: Class F Insulation <b>Insulation Class</b>
			Nil: Silver Alloy (ROHS Compliant); D: Silver Alloy: (Others) <b>Contact Material</b>

DIMENSIONS (UNIT: MM)

Outline Dimensions



PCB Layout



Wiring Diagram

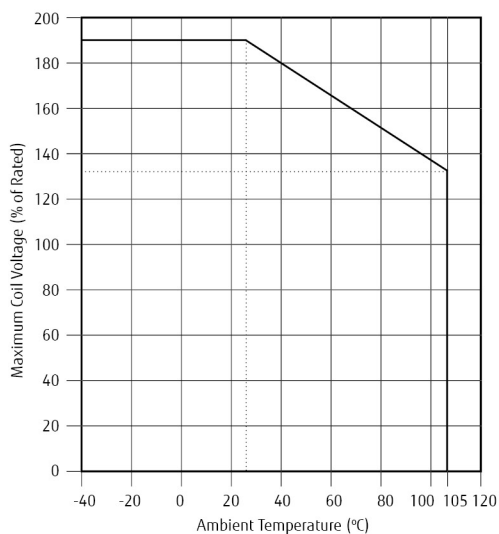


PIN TYPE 1

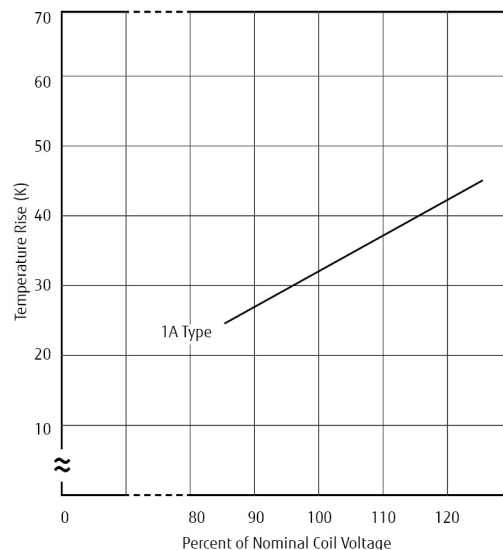
PIN TYPE 2

ENGINEERING DATA

Ambient Temperature VS. Maximum Voltage



Coil Temperature Rise



Maximum Switching Capacity

