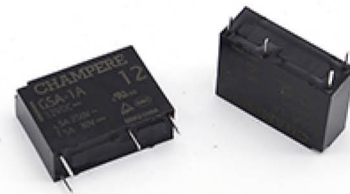


GSA. MININATURE POWER RELAY

FEATURES

- ▶ 20.5 X 7.2 X 14.8(H) MM.
- ▶ UP TO 10A MAX SWITCHING CAPACITY.
- ▶ SLIM TYPE, HIGH SENSITIVE COIL, ONLY 0.2W.
- ▶ EXCELLENT FOR COMPLEX LOAD AND LED APPLICATION.
- ▶ UL CLASS F INSULATION AVAILABLE AS STANDARD.



File Number: E516488



File Number: R50472335

CONTACT RATINGS

| | |
|------------------------|--|
| Contact Form | 1A |
| Contact Resistance | ≤100mΩ (1A 6VDC) |
| Contact Material | Ag Alloy (AgSnO ₂ , AgNi, AgSnO ₂ In ₂ O ₃) |
| Rated Load (Resistive) | FORM A |
| | 10A 277VAC (H Type) 7A / 5A 277VAC / 30VDC |
| Max. Switching Current | 10A (H Type) 7A |
| Max. Switching Power | 2,770VA / 300W (H Type) 1,939VA / 210W |
| Max. Switching Voltage | 277VAC / 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 | |
| | 4,000VAC 1min | 1,000VAC 1 min | |
| Impulse Withstand Voltage | 10 kV (1.2 x 50μs) | | |
| Shock Resistance | Non-energized | Destruction | Malfunction |
| | 100 m/s ² (10G) | 1,000 m/s ² (100G) | 100 m/s ² (10G) |
| Vibration Resistance | Destruction | | Malfunction |
| | 10 to 55 Hz, (1.5mm double amplitude) | | 10 to 55 Hz, (1.5mm double amplitude) |
| 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. 4g | | |

NOTE: The data shown above are initial values.

COIL DATA

| Standard | Approx. 200mW | | | | |
|---------------------|-----------------------|-----------------------|--------------------|----------------------|--------------------------|
| Rated Voltage (VDC) | Operate Voltage (VDC) | Release Voltage (VDC) | Max. Voltage (VDC) | Nominal Current (mA) | Coil Resistance (Ω) ±10% |
| 3 | ≤2.25 | ≥0.18 | 3.9 | 66.7 | 45 |
| 5 | ≤3.75 | ≥0.25 | 6.5 | 40 | 125 |
| 6 | ≤4.5 | ≥0.30 | 7.8 | 33.3 | 180 |
| 9 | ≤6.75 | ≥0.45 | 11.7 | 22.2 | 405 |
| 12 | ≤9 | ≥0.6 | 15.6 | 16.67 | 720 |
| 18 | ≤13.5 | ≥0.9 | 23.4 | 11.1 | 1,620 |
| 24 | ≤18 | ≥1.2 | 31.2 | 8.3 | 2,880 |

LIFE EXPECTANCY DATA

| | |
|----------------------------|--|
| Mechanical Life Expectancy | 10,000,000 Operations |
| Electrical Life Expectancy | FORM A |
| | H TYPE: 50,000 Operations (10A 277VAC Resistive Load, 1s ON / 9s OFF) |
| | 100,000 Operations (5A 277VAC Resistive Load, 1s ON / 9s OFF) |
| | 50,000 Operations (5A 30VDC Resistive Load, 1s ON / 9s OFF) |

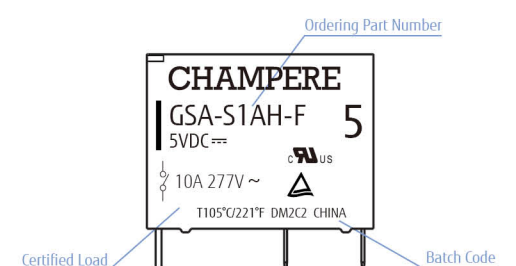
NOTE: The electrical life data items shown are possible at 23°C.

PACKAGE INFORMATION

| | |
|--|---|
| Inner Package Type & Quantity | 50Pcs Per PVC Tube |
| 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 / 4Kgs |

SIDE PRINTING

LASER PRINTING



SAFETY APPROVALS

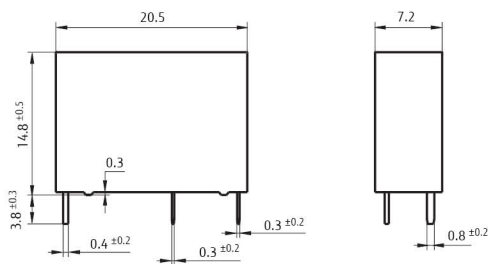
| | | |
|-------------------|-------------|---|
| ULus / cUL TUV | Coil Rating | Contact Rating |
| | 3 to 24VDC | NO 10A 277VAC 105°C 50,000 cycles (H Type) 5A / 3A 277VAC / 30VDC 105°C 100,000 cycles 7A 277VAC / 30VDC 105°C 50,000 cycles |

ORDERING INFORMATION

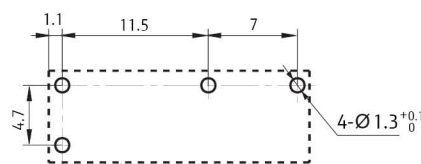
| Type | Contact / Seal Key | Variation Key | Coil Key |
|--------------|---------------------------------------|--|---|
| GSA | S 1 A H | F | 24 VDC |
| Seal Type | Nil: Flux Proof; S: Plastic Sealed | Nil: Class F Insulation with Ambient Temperature up to 85°C; F: Class F Insulation with Ambient Temperature up to 105°C | X / XX: Coil DC Voltage Value Coil Voltage |
| NO of Pole | 1: Single Pole | Nil: Standard Switching Capacity (7A / 5A 277VAC / 30VDC); H: High Switching Capacity (10A 277VAC) | Contact Capacity |
| Contact Form | A: Form A / Normally Open | | |

DIMENSIONS

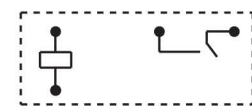
Outline Dimensions



PCB Layout

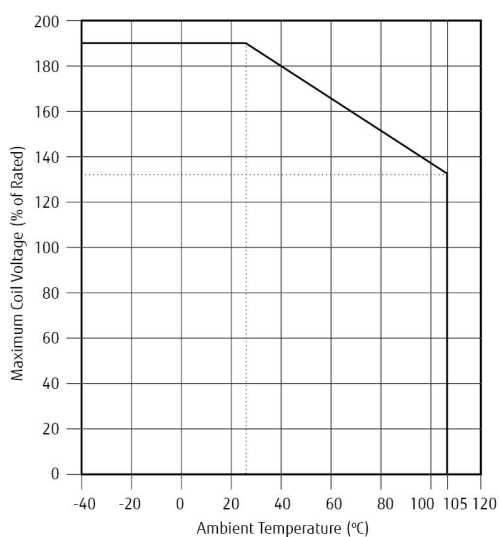


Wiring Diagram

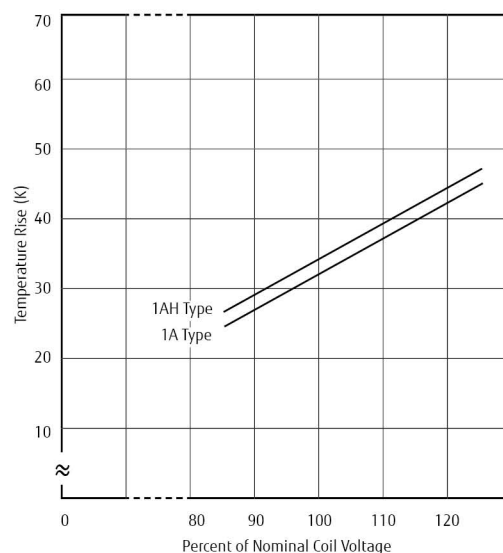


ENGINEERING DATA

Ambient Temperature VS. Maximum Voltage



Coil Temperature Rise



Maximum Switching Capacity

