

HF9210

1/5 CRYSTAL CAN 2 FORM C HERMETICALLY SEALED RELAY



Features

- Load can be 2A 28Vd.c.
- Failure rate can be M level
- High ambient applicability
- High pure nitrogen protection
- All metal welded construction
- Fusing soldering and marked by laser

Conform to GJB65B-99 (Equivalent to MIL-PRF-39016)

AMBIENT ADAPTABILITY

| Ambient grade | I | II | III |
|---------------------------|----------------------|---------------------------|---------------------------|
| Ambient temperature | -55 °C to 85 °C | -55 °C to 85 °C | -65 °C to 125 °C |
| Humidity | | | 98 %, 40 °C |
| Low air pressure | 58.53 kPa | 4.39 kPa | 4.39 kPa |
| Sine vibration | Frequency | 10 Hz to 1000 Hz | 10 Hz to 3000 Hz |
| | Acceleration | 147 m/s ² | 196 m/s ² |
| Shock resistance | 490 m/s ² | 735 m/s ² | 980 m/s ² |
| Random vibration | — | 20 (m/s ²)/Hz | 40 (m/s ²)/Hz |
| Steady-state acceleration | 147 m/s ² | 735 m/s ² | 980 m/s ² |

CONTACT DATA

| Ambient grade | I | II | III |
|--------------------|-----------------|----|--------|
| Arrangement | | | 2C |
| Contact resistance | Initial max. | | 50 mΩ |
| | After life max. | | 150 mΩ |

Contact ratings

| Ambient grade | Contact load | Type | Electrical life min. |
|---------------|-----------------------|-----------|-------------------------|
| I | 1 A 28 Vd.c. | Resistive | 1 x 10 ⁵ ops |
| | 2 A 28 Vd.c. | Resistive | 5 x 10 ⁴ ops |
| II | 1 A 28 Vd.c. | Resistive | 1 x 10 ⁵ ops |
| | 0.125 A 115 Va.c. | Resistive | 1 x 10 ⁵ ops |
| | 0.3 A 28 Vd.c. 200 mH | Inductive | 1 x 10 ⁵ ops |
| III | 2 A 28 Vd.c. | Resistive | 5 x 10 ⁴ ops |
| | 1 A 28 Vd.c. | Resistive | 1 x 10 ⁵ ops |
| | 0.125 A 115 Va.c. | Resistive | 1 x 10 ⁵ ops |
| | 0.3 A 28 Vd.c. 200 mH | Inductive | 1 x 10 ⁵ ops |
| | 0.1 A 28 Vd.c. | Lamp load | 1 x 10 ⁵ ops |
| | 50 μA 50m Vd.c. | Low level | 1 x 10 ⁵ ops |

SPECIFICATION

| Ambient grade | I | II | III |
|--|----------------------------|--|--|
| Insulation resistance min. | 1000 MΩ (@ 500 Vd.c.) | 10000 MΩ (@ 500 Vd.c.) | 10000 MΩ (@ 500 Vd.c.) |
| Dielectric strength min. (Normal condition) | Between open contacts | 500 Vr.m.s. | 500 Vr.m.s. |
| | Between contact & coil | 500 Vr.m.s. | 750 Vr.m.s. |
| | Between contact & cover | 500 Vr.m.s. | 750 Vr.m.s. |
| | Between contact group | 500 Vr.m.s. | 750 Vr.m.s. |
| | Between coil & cover | 500 Vr.m.s. | 500 Vr.m.s. |
| Dielectric strength min. (Low air pressure condition) | 300 Vr.m.s. | 350 Vr.m.s. | 350 Vr.m.s. |
| Leakage rate max. | 1 Pa·cm ³ /s | 1 x 10 ⁻¹ Pa·cm ³ /s | 1 x 10 ⁻³ Pa·cm ³ /s |
| Operate time max. | 6 ms | 4 ms | 4 ms |
| Release time max. | | | 4 ms |
| Mounting style | See the mounting dimension | | |
| Terminals | See the terminal styles | | |
| Work position | Random | | |
| Weight max. | 4.8 g | | |

COIL DATA

| | |
|---------------------|--------------|
| Norminal coil power | Approx.0.69W |
|---------------------|--------------|

Coil Version

| Order Number | Coil voltage | | at 25 °C | | | | | -65°C to 125°C | | |
|--------------|-----------------|------------|---------------------------|----------------------|---------|-------------------|-----------------------|----------------------|---------|-----------------------|
| | Nominal voltage | Value max. | Coil resistance (1±10%) Ω | Pick-up voltage max. | | Hold voltage max. | Drop-out voltage min. | Pick-up voltage max. | | Drop-out voltage min. |
| | | | | I | II, III | | | I | II, III | |
| 005 | 5 | 7 | 44 | 3.3 | 2.4 | 1.45 | 0.26 | 3.7 | 3.3 | 0.16 |
| 006 | 6 | 8 | 56 | 3.9 | 2.7 | 1.60 | 0.30 | 4.5 | 3.8 | 0.18 |
| 009 | 9 | 12 | 140 | 5.9 | 4.4 | 2.60 | 0.50 | 6.8 | 6.0 | 0.30 |
| 012 | 12 | 16 | 210 | 7.8 | 5.4 | 3.20 | 0.60 | 9.0 | 7.4 | 0.36 |
| 018 | 18 | 24 | 650 | 11.7 | 9.5 | 5.60 | 1.00 | 13.5 | 12.8 | 0.60 |
| 027 | 27 | 35 | 1350 | 17.6 | 13.5 | 8.10 | 1.50 | 20.2 | 18.0 | 0.90 |

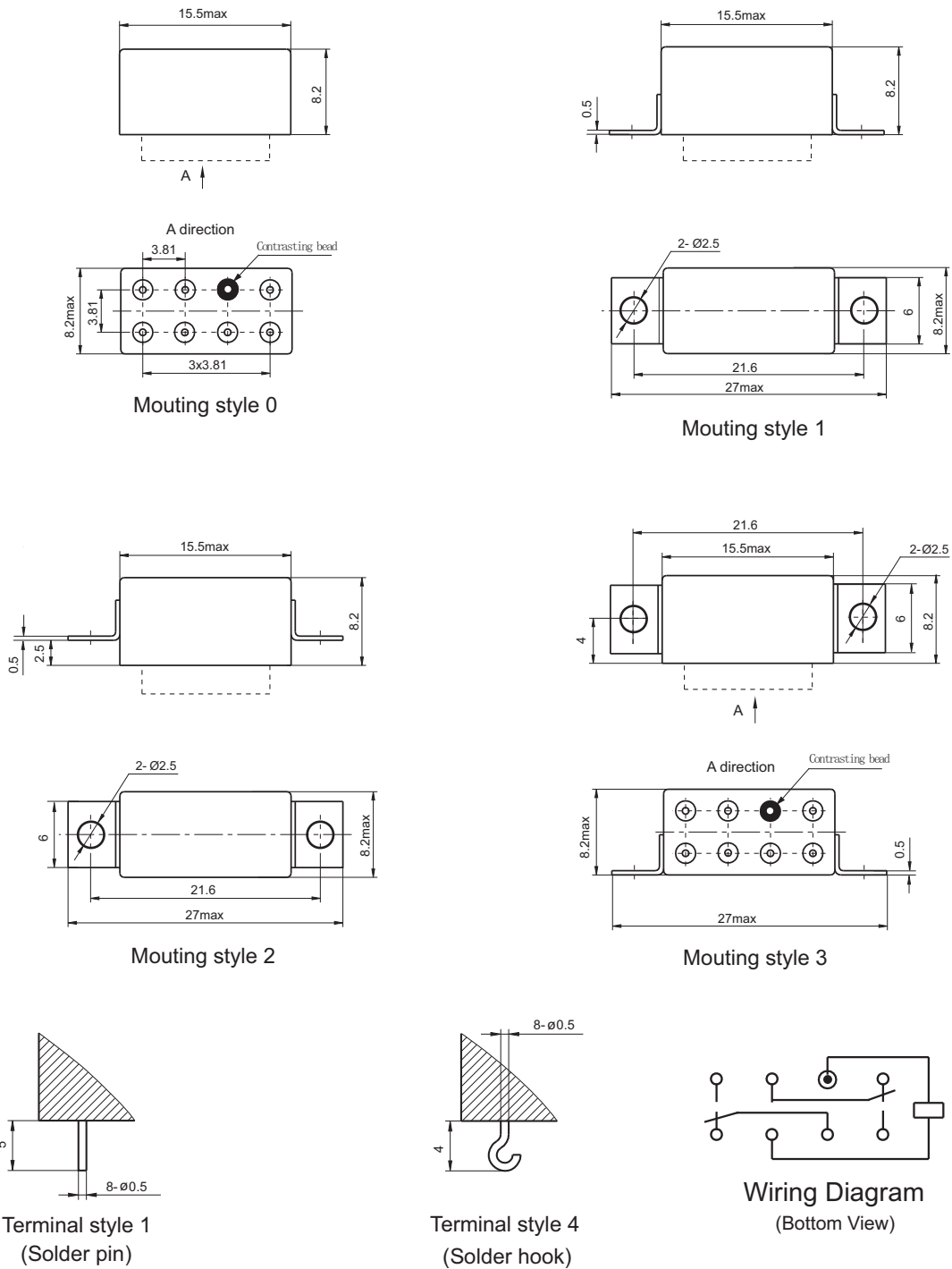
Notes: We can offer many kinds of coil voltage under the requirement of users.

ORDERING INFORMATION

| | | | | | | |
|-----------------|---|------|---|----|---|-----|
| Type | HF9210 | -012 | M | -0 | 1 | - I |
| Order Number | 005、006、009、012、018、027、036 | | | | | |
| Failure Rate | L: Failure rate level L (level III products available) ¹⁾ M: Failure rate level M (level III products available) ¹⁾ Nil: Without failure rate requirement(level I ,II ,IIIproducts available) | | | | | |
| Mounting Style | 0, 1, 2, 3 (See the mounting dimension) | | | | | |
| Terminals Style | 1, 4 (See " Terminal styles " below) | | | | | |
| Ambient Grade | I : level I II : level II III: level III | | | | | |

Notes: 1) For the failure rate of L or M ,the letter "III" of ambient grade level will not appear on relay cover.

Outline Dimension



Disclaimer

This datasheet is for the customers' reference. All the specifications are subject to change without notice.

© Xiamen Hongfa Hermetically Sealed Relays Co., Ltd. All rights of Hongfa are reserved.