

HF9314

HALF-SIZE CRYSTAL CAN HERMETICALLY SEALED RELAY WITH 10A LOAD



Features

- Load can be 10A 28Vd.c.
- High ambient applicability
- 1 Form C
- All metal welded construction
- Hermetically welded and marked by laser

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 2000 Hz                        | 10 Hz to 3000 Hz                        |
|                           | Acceleration | 147 m/s <sup>2</sup> | 196 m/s <sup>2</sup>                    | 294 m/s <sup>2</sup>                    |
| Shock resistance          |              | 490 m/s <sup>2</sup> | 735 m/s <sup>2</sup>                    | 980 m/s <sup>2</sup>                    |
| Random vibration          |              |                      | 20 (m/s <sup>2</sup> ) <sup>2</sup> /Hz | 40 (m/s <sup>2</sup> ) <sup>2</sup> /Hz |
| Steady-state acceleration |              | 490 m/s <sup>2</sup> |                                         |                                         |

CONTACT DATA

| Ambient grade      |                 | I      | II | III |
|--------------------|-----------------|--------|----|-----|
| Arrangement        |                 | 1 C    |    |     |
| Contact resistance | Initial max.    | 50 mΩ  |    |     |
|                    | After life max. | 100 mΩ |    |     |

Contact ratings

| Ambient grade | Contact load  | Type      | Electrical life min.    |
|---------------|---------------|-----------|-------------------------|
| I             | 10 A 28 Vd.c. | Resistive | 3 x 10 <sup>4</sup> OPS |
| II            | 10 A 28 Vd.c. | Resistive | 3 x 10 <sup>4</sup> OPS |
| III           | 10 A 28 Vd.c. | Resistive | 5 x 10 <sup>4</sup> OPS |
|               | 5 A 28 Vd.c.  | Resistive | 1 x 10 <sup>5</sup> 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.<br>(Normal condition)           | Between open contacts   | 500 Vr.m.s.                | 500 Vr.m.s.                                | 500 Vr.m.s.                                |
|                                                          | Between contact & coil  | 750 Vr.m.s.                | 1000 Vr.m.s.                               | 1000 Vr.m.s.                               |
|                                                          | Between contact & cover | 750 Vr.m.s.                | 1000 Vr.m.s.                               | 1000 Vr.m.s.                               |
|                                                          | Between coil & cover    | 500 Vr.m.s.                | 500 Vr.m.s.                                | 500 Vr.m.s.                                |
| Dielectric strength min.<br>(Low air pressure condition) |                         | 300 Vr.m.s.                | 350 Vr.m.s.                                | 350 Vr.m.s.                                |
| Leakage rate max.                                        |                         | 1 Pa•cm <sup>3</sup> /s    | 1 x 10 <sup>-1</sup> Pa•cm <sup>3</sup> /s | 1 x 10 <sup>-3</sup> Pa•cm <sup>3</sup> /s |
| Operate time max.                                        |                         | 6 ms                       |                                            |                                            |
| Release time max.                                        |                         | 4 ms                       |                                            |                                            |
| Mounting style                                           |                         | See the mounting dimension |                                            |                                            |
| Terminals                                                |                         | See the terminal styles    |                                            |                                            |
| Work position                                            |                         | Random                     |                                            |                                            |
| Weight max.                                              |                         | 13 g                       |                                            |                                            |

COIL DATA

|                     |              |
|---------------------|--------------|
| Norminal coil power | Approx. 1.2W |
|---------------------|--------------|

| Coil Version |                 |            |                           |                      |                   |                       | Vd.c.                |                   |                       |
|--------------|-----------------|------------|---------------------------|----------------------|-------------------|-----------------------|----------------------|-------------------|-----------------------|
| 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. | Hold voltage max. | Drop-out voltage min. |
| 005          | 5               | 6.0        | 21                        | 3.0                  | 1.65              | 0.29                  | 4.2                  | 2.4               | 0.21                  |
| 006          | 6               | 7.5        | 30                        | 3.6                  | 2.00              | 0.35                  | 5.1                  | 2.9               | 0.25                  |
| 009          | 9               | 11.8       | 68                        | 5.4                  | 3.00              | 0.52                  | 7.7                  | 4.3               | 0.38                  |
| 012          | 12              | 15.0       | 125                       | 7.3                  | 4.00              | 0.70                  | 10.5                 | 5.8               | 0.50                  |
| 024          | 24              | 28.8       | 480                       | 14.8                 | 7.50              | 1.20                  | 20.8                 | 11.6              | 0.90                  |
| 027          | 27              | 32.0       | 600                       | 16.0                 | 8.00              | 1.50                  | 22.5                 | 14.0              | 1.00                  |

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

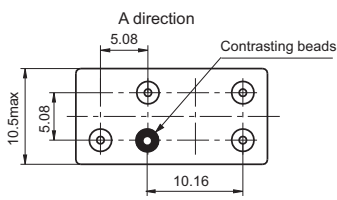
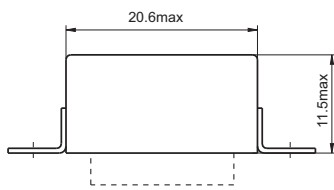
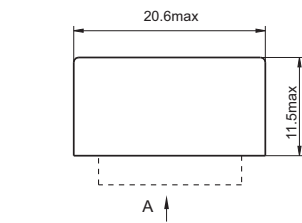
ORDERING INFORMATION

|                 |                                         |      |    |   |     |
|-----------------|-----------------------------------------|------|----|---|-----|
| Type            | HF9314                                  | -012 | -0 | 1 | - I |
| Order Number    | 005、006、009、012、024、027                 |      |    |   |     |
| Mounting Style  | 0, 1, 2, 3 (See the mounting dimension) |      |    |   |     |
| Terminals Style | 1、4 (See " Terminal styles " below)     |      |    |   |     |
| Ambient Grade   | I 、 II 、 III                            |      |    |   |     |

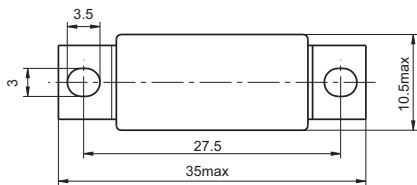
OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit:mm

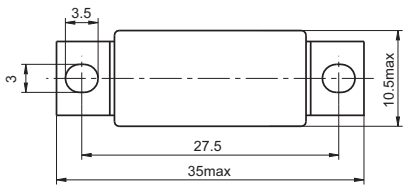
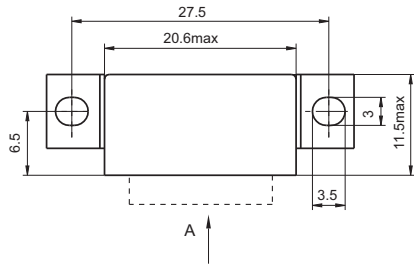
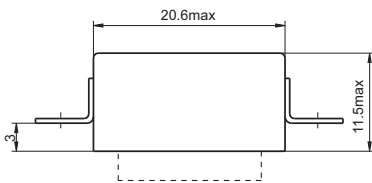
Outline Dimension



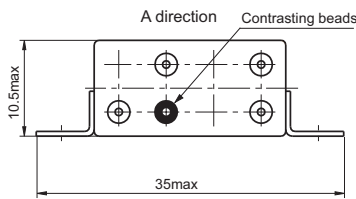
Mouting style 0



Mouting style 1



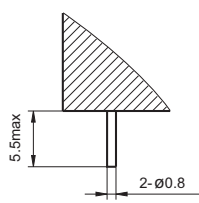
Mouting style 2



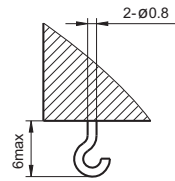
Mouting style 3

OUTLINE DIMENSIONS AND WIRING DIAGRAM

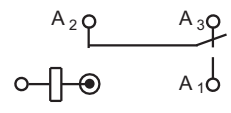
Unit:mm



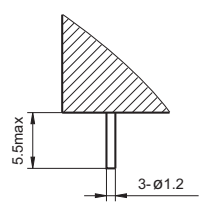
Coil Terminal Style 1  
(Solder pin)



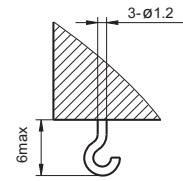
Coil Terminal Style 4  
(Solder hook)



Wiring Diagram  
(Bottom View)



Contact Terminal Style 1  
(Solder pin)



Contact Terminal Style 4  
(Solder hook)

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