

# HF9311

## HALF-SIZE CRYSTAL CAN HIGH DIELECTRIC STRENGTH HERMETICALLY SEALED RELAY



### Features

- Dielectric strength can be 1200 Vr.m.s
- Load can be 5A 28Vd.c.
- High ambient applicability
- 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 Acceleration	10 Hz to 1000 Hz 147 m/s <sup>2</sup>	10 Hz to 2000 Hz 196 m/s <sup>2</sup>	10 Hz to 3000 Hz 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			2 C
Contact resistance	Initial max. After life max.		50 mΩ 100 mΩ

### Contact ratings

Ambient grade	Contact load	Type	Electrical life min.
I	5 A 28 Vd.c.	Resistive	2 x 10 <sup>4</sup> OPS
II	5 A 28 Vd.c.	Resistive	5 x 10 <sup>4</sup> OPS
	2 A 115Vd.c.	Resistive	1 x 10 <sup>5</sup> OPS
III	5 A 28 Vd.c.	Resistive	1 x 10 <sup>5</sup> OPS
	50 μA 50 mVd.c.	Low level	1 x 10 <sup>5</sup> OPS



HONGFA HERMETICALLY SEALED RELAY

## 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	1200 Vr.m.s.	1200 Vr.m.s.
	Between contact & cover	1200 Vr.m.s.	1200 Vr.m.s.
	Between contact group	1200 Vr.m.s.	1200 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 <sup>3</sup> /s	1 × 10 <sup>-1</sup> Pa·cm <sup>3</sup> /s	1 × 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

Normal coil power	Approx.1.2W
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### 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.
005	5	6.0	21	3.0	1.65	0.29	4.2	2.4
006	6	7.5	30	3.6	2.00	0.35	5.1	2.9
009	9	11.8	68	5.4	3.00	0.52	7.7	4.3
012	12	15.0	125	7.3	4.00	0.70	10.5	5.8
024	24	28.8	480	14.8	7.50	1.20	20.8	11.6
027	27	32.0	600	16.0	8.50	1.50	22.5	14.0

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

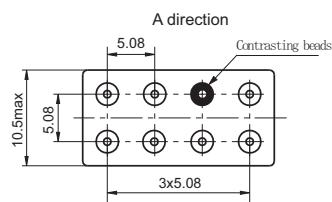
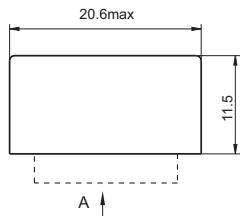
## ORDERING INFORMATION

Type	HF9311	-012	-0	1	- I
Order Number	005、006、009、012、018、027				
Mounting Style	0, 1, 2, 3 (See the mounting dimension)				
Terminals Style	1, 4 (See " Terminal styles " below)				
Ambient Grade	I 、 II 、 III				

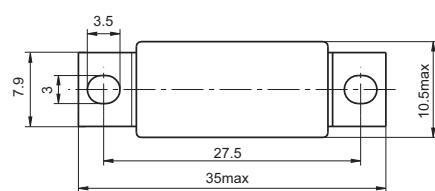
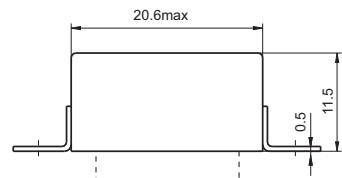
## OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit:mm

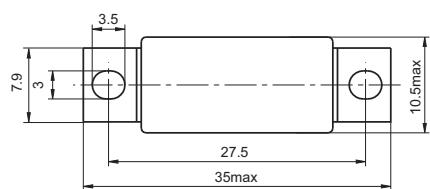
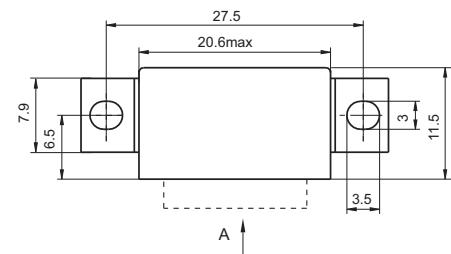
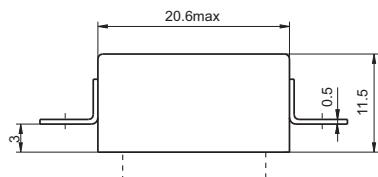
### Outline Dimension



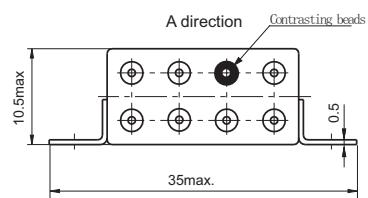
Mounting style 0



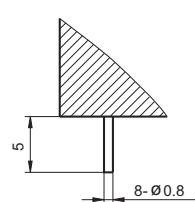
Mounting style 1



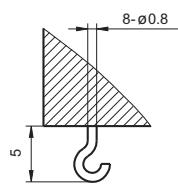
Mounting style 2



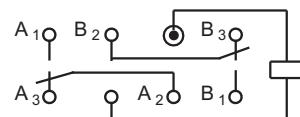
Mounting style 3



Terminal style 1  
(Solder pin)



Terminal style 4  
(Solder hook)



Wiring Diagram  
(Bottom View)

### Disclaimer

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