

# HF9318

## 1/2 CRYSTAL CAN HERMETICALLY SEALED RF RELAY



### Features

- Broadband
- Low insertion loss, high isolation
- High ambient applicability
- All metal welded construction
- Hermetically welded and marked by laser

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

### AMBIENT ADAPTABILITY

Ambient grade	I	II
Ambient temperature	-55 °C to 85 °C	-65 °C to 125 °C
Humidity		98 %, 40 °C
Low air pressure	58.53 kPa	4.4 kPa
Sine vibration	Frequency	10 Hz to 2 000 Hz
	Acceleration	147 m/s <sup>2</sup>
Shock resistance	490 m/s <sup>2</sup>	735 m/s <sup>2</sup>
Random vibration		20 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Steady-state acceleration		490 m/s <sup>2</sup>

### CONTACT DATA

Ambient grade	I	II
Arrangement		1 C, 2 C
Contact resistance	Initial max.	175 mΩ
	After life max.	250 mΩ

### RF feature list

Working frequency	Voltage Standing Wave Ratio max.	Insertion loss max.	Isolation min.	Power capability W
0 MHz~100 MHz	1.09:1.0	0.25dB	47dB	80W
101 MHz~500 MHz	1.17:1.0	0.50dB	33dB	50W
501 MHz~1000 MHz	1.35:1.0	0.70dB	27dB	30W

### Contact ratings

Ambient grade	Contact load	Type	Electrical life min.
I	2.0 A 28 Vd.c.	Resistive	1 x 10 <sup>5</sup> ops
	2.0 A 28 Vd.c.	Resistive	1 x 10 <sup>5</sup> ops
II	0.5 A 28 Vd.c. 200 mH	Inductive	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
Insulation resistance min.		1000 MΩ (@ 500 Vd.c.)	1000 MΩ (@ 500 Vd.c.)
Dielectric strength min. (Normal condition)	Between open contacts	500 Vr.m.s.	500 Vr.m.s.
	Between contact & coil	750 Vr.m.s.	1000 Vr.m.s.
	Between contact & cover	750 Vr.m.s.	1000 Vr.m.s.
	Between contact group	750 Vr.m.s.	1000 Vr.m.s.
	Between coil & cover	500 Vr.m.s.	500 Vr.m.s.
Dielectric strength min. (Low air pressure condition)		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
Operate time max.		6 ms	5 ms
Release time max.		5 ms	5 ms
Mounting style		See the mounting dimension	
Terminals		See the terminal styles	
Weight max.	1 Z	22.5 g	
	2 Z	34 g	

## COIL DATA

Norminal coil power	Approx.1.0W
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### Coil Version

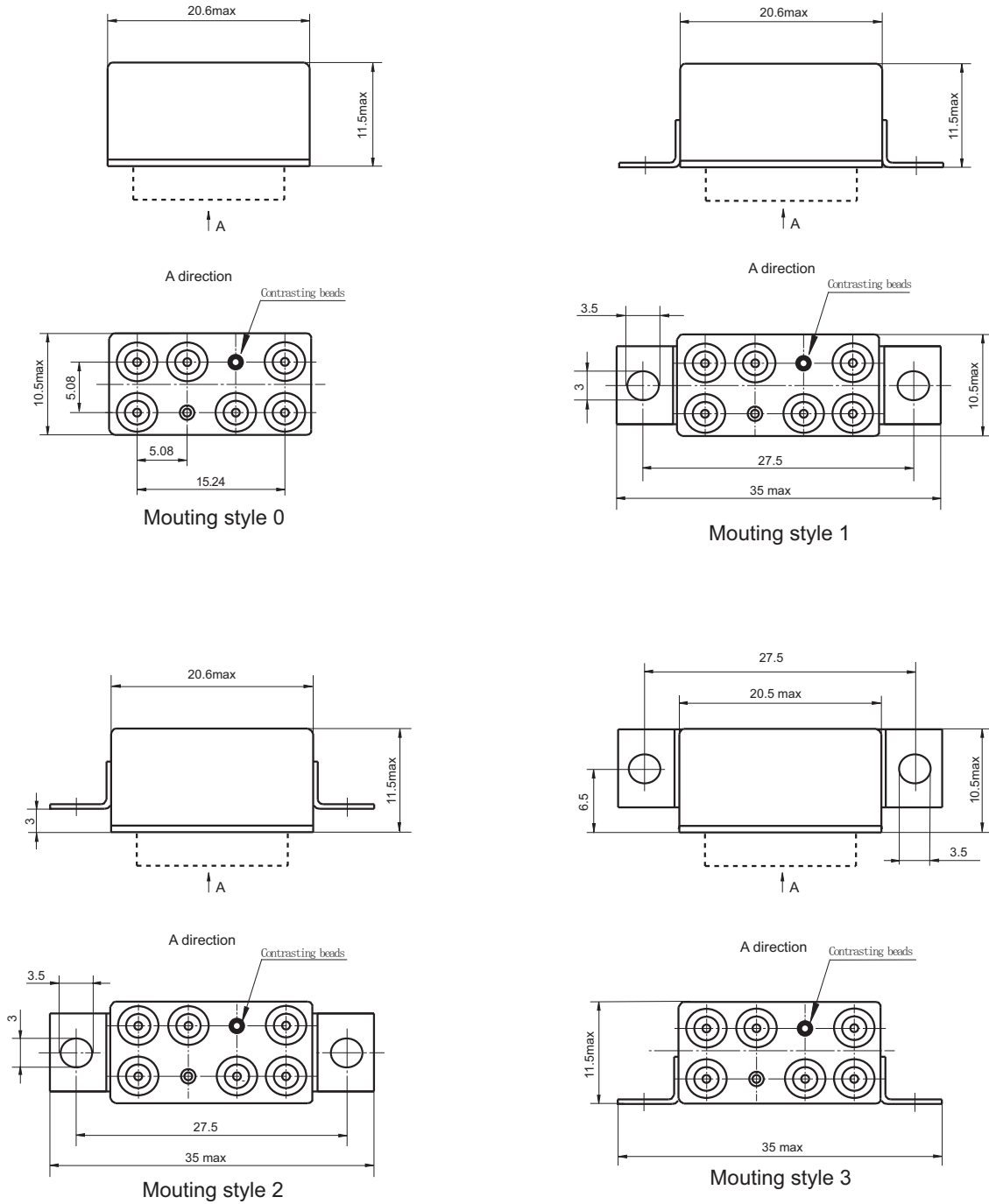
Order Number	Coil voltage		at 25 °C					-65°C to 125°C			
	Nominal voltage	Value max.	Coil resistance (1±10%) (Ω)	Pick-up voltage max.		Hold voltage max.	Drop-out voltage min.	Pick-up voltage max.		Hold voltage max.	Drop-out voltage min.
				I	II			I	II		
006	6	7.5	40	3.6	3.2	2.00	0.35	4.8	4.5	2.9	0.25
012	12	15.0	160	7.2	6.4	4.00	0.70	9.6	9.0	5.8	0.50
027	27	32.0	700	16.2	13.5	8.00	1.50	21.6	18.0	14.0	1.00

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

## ORDERING INFORMATION

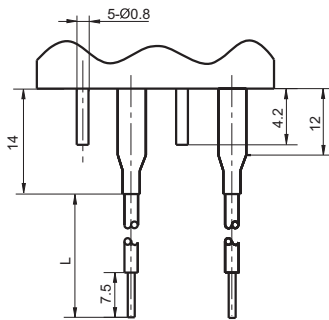
Type	HF9318	-012	-0	-1	-1	-2	- I
Order Number	006、012、027						
Mounting Style	0、1、2、3 (See the mounting dimension)						
Terminals Style	0、1 (See " Terminal styles " below)						
Coaxial Cable code	0、1 (See " Terminal styles " below)						
RF contacts arrangement	1、2						
Ambient Grade	I、II						

Outline Dimension

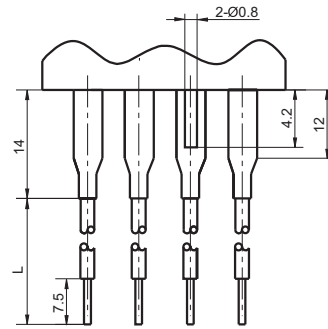


# OUTLINE DIMENSIONS AND WIRING DIAGRAM

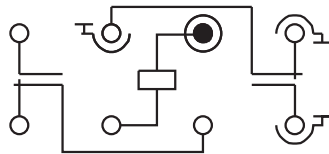
Unit:mm



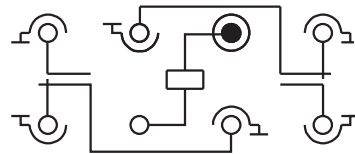
Terminal style 0  
(1 Form C RF contacts and 1 Form C DC contacts)



Terminal style 1  
(2 Form C RF contacts)



1 Form C RF contacts and 1 Form C DC contacts bottom view



2 Form C RF contacts bottom view

Type	SFF-50-1	SFF-50-1.5-1
Code	0	1
L	150mm	200mm

## Disclaimer

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

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