

HF9310

HALF-SIZE CRYSTAL CAN HERMETICALLY SEALED
ELECTRO MAGNETIC RELAY WITH ESTABLISHED RELIABILITY



Features

- Failure rate can be level M
- Qualified by China military standard
- High ambient applicability
- Diode type products available
- Hermetically welded and marked by laser

AMBIENT ADAPTABILITY

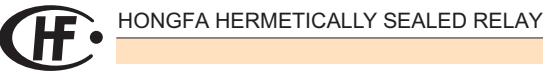
Ambient grade	I	II	III
Ambient temperature	-55 °C to 85 °C	-55 °C to 85 °C	-65 °C to 125 °C
Humidity	98 %, 40 °C		
Low air pressure	58.53 kPa	4.39 kPa	4.39 kPa
Sine vibration	Frequency	10 Hz to 1000 Hz	10 Hz to 3000 Hz
	Acceleration	147 m/s ²	294 m/s ²
Shock resistance	490 m/s ²	735 m/s ²	980 m/s ²
Random vibration		20 (m/s ²) ² /Hz	40 (m/s ²) ² /Hz
Steady-state acceleration			490 m/s ²

CONTACT DATA

Ambient grade		I	II	III
Arrangement		2 C		
Contact resistance	Initial max.	50 mΩ		
	After life max.	100 mΩ		
Failure level		Level L、M		

Contact ratings

Ambient grade	Contact load	Type	Electrical life min.
I	2 A 28 Vd.c.	Resistive	1 x 10 ⁵ OPS
II	2 A 28 Vd.c.	Resistive	1 x 10 ⁵ OPS
	0.1 A 115 Va.c.	Resistive	1 x 10 ⁵ OPS
	0.5 A 28 Vd.c. 200 mH	Inductive	1 x 10 ⁵ OPS
	2 A 28 Vd.c.	Resistive	1 x 10 ⁵ OPS
III	0.3 A 115 Va.c.	Resistive	1 x 10 ⁵ OPS
	0.75 A 28 Vd.c. 200 mH	Inductive	1 x 10 ⁵ OPS
	0.16 A 28 Vd.c.	Lamp load	1 x 10 ⁵ OPS
	50 μA 50 mVd.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.	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 contact group	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. (Low air pressure condition)		350 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.		13 g		

COIL DATA	
Norminal coil power	Approx. 0.9W

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.
				I	II , III			I	II , III		
005	5	6.0	27	3.0	2.7	1.65	0.29	4.0	3.8	2.4	0.21
006	6	7.5	40	3.6	3.2	2.00	0.35	4.8	4.5	2.9	0.25
009	9	10.8	90	5.4	4.8	3.00	0.52	7.2	6.75	4.4	0.38
012	12	15.0	160	7.2	6.4	4.00	0.70	9.6	9.0	5.8	0.50
024	24	30.0	600	14.4	12.8	7.00	1.20	19.2	17.0	10.2	0.90
027	27	32.0	700	16.2	13.5	8.00	1.20	21.6	18.0	14.0	1.00

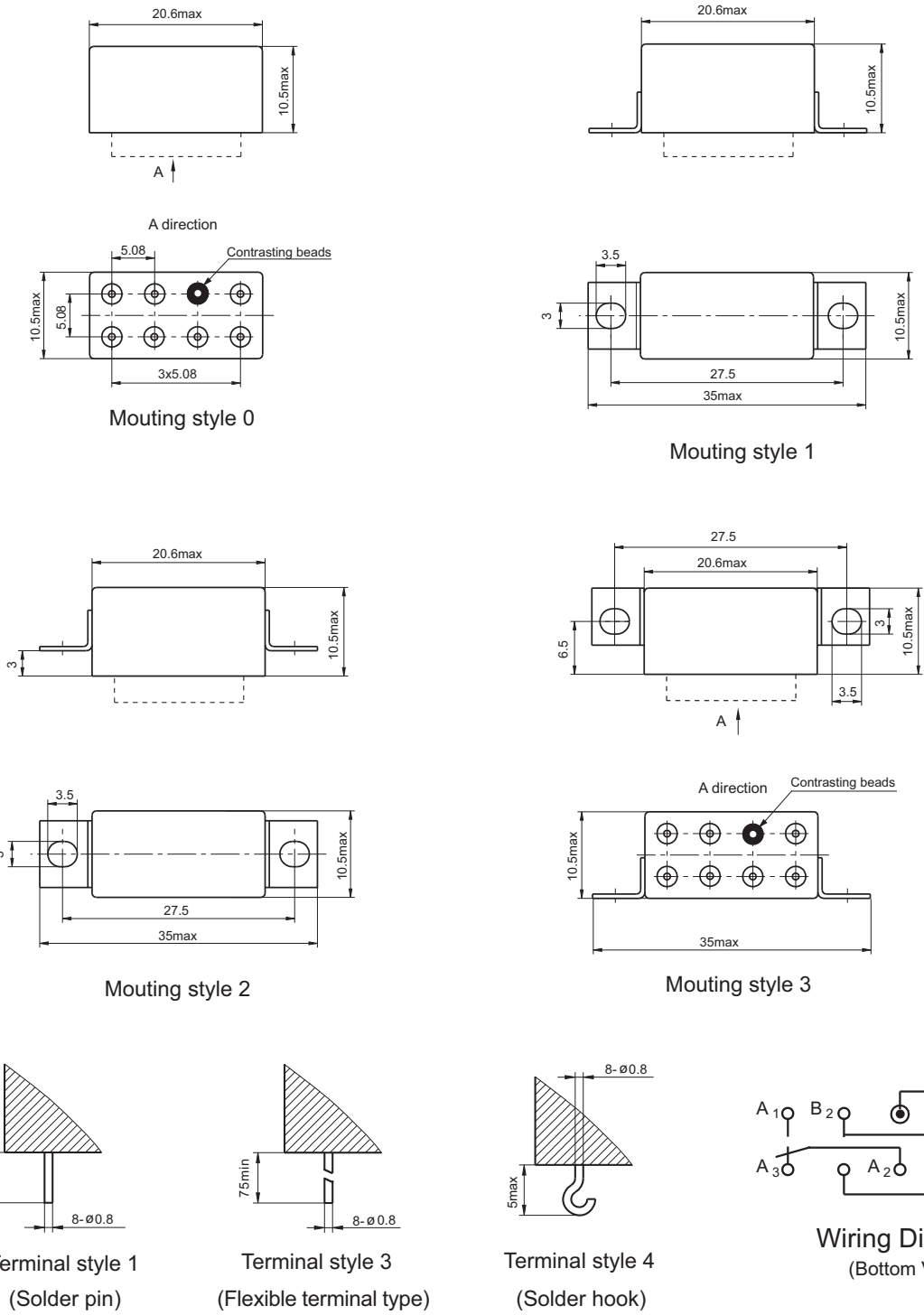
Notes: We can offer many kinds of coil voltage under the requirement of users.

ORDERING INFORMATION						
Type	HF9310	-012	M	-0	1	- I
Order Number	005、006、009、012、018、027					
Failure Rate	L: Failure rate level L (level III products available) M: Failure rate level M (level III products available) Nil: Without failure rate requirement(level I ,II products available)					
Mounting Style	0, 1, 2, 3 (See the mounting dimension)					
Terminals Style	1, 3, 4 (See " Terminal styles " below)					
Ambient Grade	I : level I II : level II Nil: level III (with failure rate requirement)					

OUTLINE DIMENSIONS AND WIRING DIAGRAM

Unit:mm

Outline Dimension



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