

SAFETY APPROVAL RATINGS

UL/CUL (AgNi, AgSnO ₂)	version 1,3,5,6	10A 250VAC at 85°C
		10A 30VDC at 85°C
VDE (AgNi, AgNi+Au)	1H (-;S) (1;3;5) (-;G)	B300 at 85°C
		R300 at 85°C
VDE (AgSnO ₂ , AgSnO ₂ +Au)	1H (-;S) (1;3;5), T.(-;G)	1/2HP 240VAC at 85°C
		AgSnO ₂ : 1/3HP 120VAC at 85°C
VDE (AgNi, AgNi+Au)	1D (-;S) (1;3;6) (-;G)	8A 250VAC at 85°C
		8A 250VAC at 85°C
VDE (AgSnO ₂ , AgSnO ₂ +Au)	1Z (-;S) (1;3), T.(-;G)	8A 250VAC at 85°C
		8A 250VAC at 85°C
VDE (AgNi, AgNi+Au)	1H (-;S) (1;3;5), T.(-;G)	8A 250VAC at 85°C
		8A 250VAC at 85°C
VDE (AgSnO ₂ , AgSnO ₂ +Au)	1H (-;S) (1;3;5), T.(-;G)	8A 250VAC at 85°C
		8A 250VAC at 85°C
VDE (AgSnO ₂ , AgSnO ₂ +Au)	1Z (-;S) (1;3), T.(-;G)	8A 250VAC at 85°C
		8A 250VAC at 85°C
VDE (AgSnO ₂ , AgSnO ₂ +Au)	1H (-;S) (1;3;5), T.(-;G)	AC-15 (Make: 30A 250VAC COS Ø=0.7 at 85°C Break: 3A 250VAC COS Ø=0.4 at 85°C)
		NO: AC-15 (Make: 30A 250VAC COS Ø=0.7 at 85°C Break: 3A 250VAC COS Ø=0.4 at 85°C)
VDE (AgSnO ₂ , AgSnO ₂ +Au)	1Z (-;S) (1;3), T.(-;G)	NO: AC-15 (Make: 30A 250VAC COS Ø=0.7 at 85°C Break: 3A 250VAC COS Ø=0.4 at 85°C)
		NO: AC-15 (Make: 30A 250VAC COS Ø=0.7 at 85°C Break: 3A 250VAC COS Ø=0.4 at 85°C)

Notes: 1) All values unspecified are at room temperature.
2) Only typical loads are listed above. Other load specifications can be available upon request.

ORDERING INFORMATION

Type		HF118F / 012 -1H S 1 G (XXX)
Coil voltage	5, 6, 9, 12, 18, 24, 48, 60VDC	
Contact arrangement	1H: 1 Form A 1D: 1 Form B 1Z: 1 Form C	
Construction ¹⁾²⁾	S: Plastic sealed Nil: Flux proofed	
Version (See Wiring Diagram below)	1: 3.2mm 1 pole 8A 3: 3.2mm 1 pole 10A, double pinning 5: 5mm 8A, only 1 Form A 6: 5mm 8A, only 1 Form B	
Contact material ³⁾	T: AgSnO ₂ G: AgNi+Au plated TG: AgSnO ₂ +Au plated Nil: AgNi	
Special code ⁴⁾	XXX: Customer special requirement Nil: Standard	

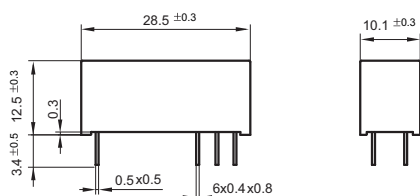
Notes: 1) We recommend flux proofed types for a clean environment (free from contaminations like H₂S, SO₂, NO₂, dust, etc.). We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H₂S, SO₂, NO₂, dust, etc.).
2) Contact is recommended for suitable condition and specifications if water cleaning or surface process is involved in assembling relays on PCB.
3) For gold plated type, the min. switching current and min. switching voltage is 10mA 5VDC.
4) The customer special requirement express as special code after evaluating by Hongfa. e.g.(335) stands for product in accordance to IEC 60335-1 (GWT). e.g.(253) stands for Reflow soldering version.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

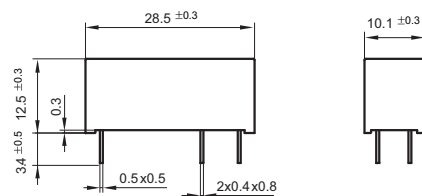
Unit: mm

Outline Dimensions

3.2mm pinning



5mm pinning



OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

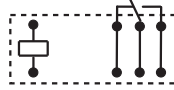
Unit: mm

Wiring Diagram (Bottom view)

Version 1



Version 3



Version 5

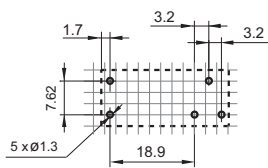


Version 6

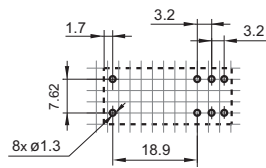


PCB Layout (Bottom view)

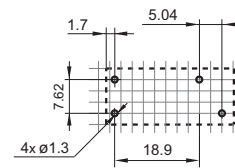
Version 1



Version 3



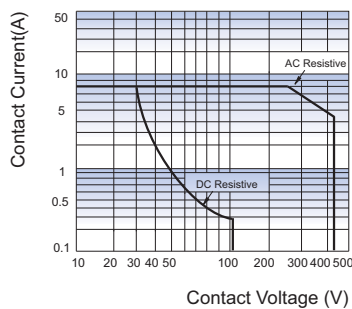
Version 5/6



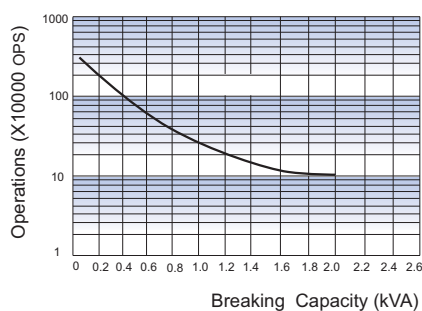
- Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.
 2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.
 3) The width of the gridding is 2.54mm.

CHARACTERISTIC CURVES

MAXIMUM SWITCHING POWER



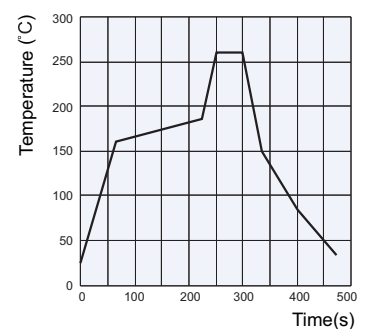
ENDURANCE CURVE



Notes:

- Curve: 1Z1 type
- Test conditions:
 NO, Resistive load, 250VAC
 Flux proofed, Room temp., 1s on 9s off.

REFLOW WELDING TEMPERATURE
(Reflow soldering version)



Relay Sockets




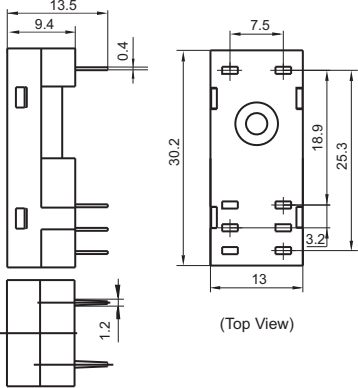
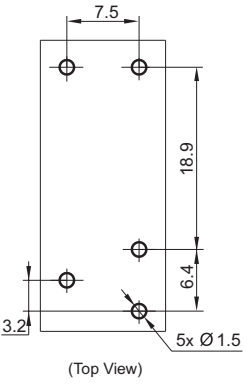

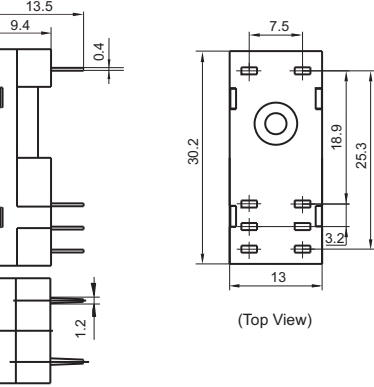
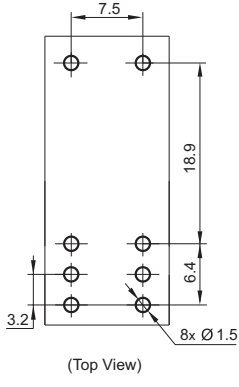
Features

- The dielectric strength can reach 5000VAC and the insulation resistance is 1000MΩ
- Two mounting types are available: PCB and screw mounting.
- Environmental friendly product (RoHS compliant)

CHARACTERISTICS

Type	Nominal Voltage	Nominal Current	Ambient Temperature	Dielectric Strength min.
118F-1Z-A1-1	250VAC	10A	-40 °C to 70°C	5000VAC
118F-2Z-A1	250VAC	10A	-40 °C to 70°C	5000VAC

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT Unit: mm

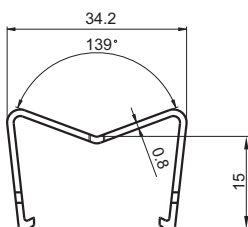
Socket	Outline Dimensions	Wiring Diagram	Components Available
<p>118F-1Z-A1-1</p>  <p>PCB terminal, PCB or Screw mounting Applicable for HF118F/XXX-1XX1XX</p>	 <p>(Top View)</p>	 <p>(Top View)</p>	<p>metallic retainer 118F-H1</p>
<p>118F-2Z-A1</p>  <p>PCB terminal, PCB or Screw mounting Applicable for HF118F/XXX-1XX3XX</p>	 <p>(Top View)</p>	 <p>(Top View)</p>	<p>metallic retainer 118F-H1</p>

DIMENSION OF RELATED COMPONENT (AVAILABLE)

Unit: mm

Retainer

118F-H1 (Metallic retainer)



Things to be noticed when selecting sockets:

1. Please choose suitable relay socket according to the actual mounting environment, relay contact poles and terminal layout. If there is any query on selection, please contact Hongfa for the technical service.
2. As for related components, they should be selected separately. Please do give clear indication of the types of relay sockets and related components you choose while placing order.
3. The above is only an example of typical socket and related component type which is suitable to HF118F 1 poles relay. If you have any special requirements, please contact us.
4. Main outline dimension(L, W, H) ≥ 50 mm, tolerance should be ± 1 mm; outline dimension > 20 mm and < 50 mm, tolerance should be ± 0.5 mm; outline dimension ≤ 20 mm, tolerance should be ± 0.3 mm.

Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice.. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.

© Xiamen Hongfa Electroacoustic Co., Ltd. All rights of Hongfa are reserved.