

SAFETY APPROVAL RATINGS

UL/CUL (AgNi, AgSnO ₂)	version 1,3,5,6	10A 250VAC 10A 30VDC B300 R300 1/2HP 240VAC (NO only) AgSnO ₂ : 1/3HP 120VAC (NO only)
VDE (AgNi, AgNi+Au)	1H (;S) (1;3;5) (-;G) 1D (;S) (1;3;6) (-;G) 1Z (-;S) (1;3) (-;G)	10A 250VAC at 85°C 8A 250VAC at 85°C 10A 250VAC at 85°C
VDE (AgSnO ₂ , AgSnO ₂ +Au)	1H (-;S) (1;3;5), T.(-;G) 1D (-;S) (1;3;6), T.(-;G) 1Z (-;S) (1;3), T.(-;G) 1H (-;S) (1;3;5), T.(-;G) 1Z (-;S) (1;3), T.(-;G)	10A 250VAC at 85°C 8A 250VAC at 85°C 10A 250VAC at 85°C 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 5 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 Form C 3: 3.2mm 1 Form C, double pinning 5: 5mm, 1 Form A 6: 5mm, 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) means Through-Hole Reflow Version(valid for Flux proofed only).

5) Standard tube packing length is 600mm. Any special requirement needed, please contact us for more details.

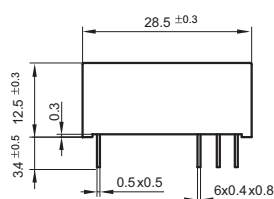
6) For products that should meet the explosion-proof requirements of "IEC 60079 series", please note [Ex] after the specification while placing orders. Not all products have explosion-proof certification, so please contact us if necessary, in order to select the suitable products.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

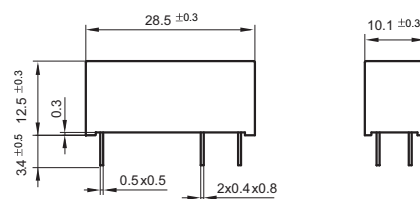
Unit: mm

Outline Dimensions

3.2mm pinning



5mm pinning



OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

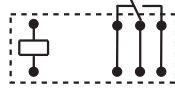
Unit: mm

Wiring Diagram (Bottom view)

1 Form C, Version 1



1 Form C, Version 3



1 Form A, Version 5

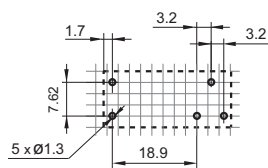


1 Form B, Version 6

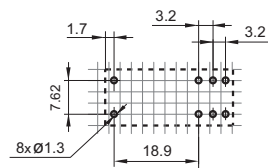


PCB Layout (Bottom view)

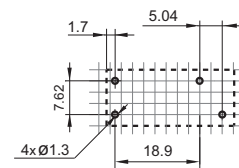
Version 1



Version 3



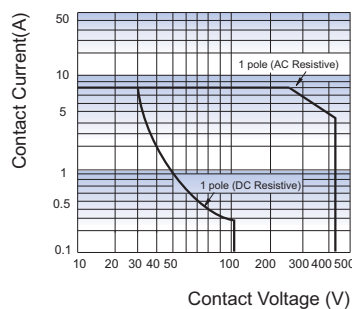
Version 5/6



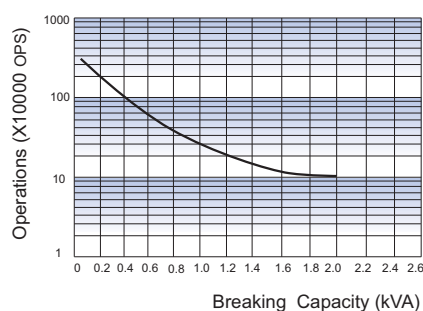
- Remark: 1) The pin dimension of the product outline drawing is the size before tinning (it will become larger after tinning), and the mounting hole size is the recommended design size of the PCB board hole. The specific PCB board hole design size can be mapped and adjusted according to the actual product.
- 2) 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 $\pm 0.4\text{mm}$.
- 3) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.
- 4) The width of the gridding is 2.54mm.

CHARACTERISTIC CURVES

MAXIMUM SWITCHING POWER



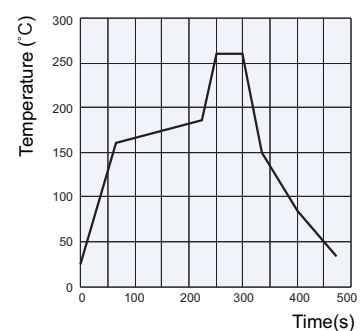
ENDURANCE CURVE



Notes:

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

REFLOW WELDING TEMPERATURE
(Reflow soldering version)



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.

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