## SAFETY APPROVAL RATINGS

| | | | |
|---|---|---|---|
| UL/CUL | 1 Form A | AgCdO | 5A 250VAC/30VDC at 40˚C<br>8A 250VAC at 40˚C<br>10A 125VAC at 40˚C<br>10A 277VAC COSØ =0.4 at 40˚C<br>1/10HP 125VAC, 1/6HP 250VAC at 40˚C |
| | | AgNi | 5A 250VAC/30VDC at 70˚C<br>8A 250VAC at 70˚C<br>10A 125VAC at 70˚C<br>10A 277VAC COSØ =0.4 at 70˚C<br>1/10HP 125VAC, 1/6HP 250VAC at 70˚C |
| | | $AgSnO_2$ | 5A 250VAC/30VDC at 70˚C<br>10A 125VAC at 70˚C<br>1A tungsten 120VAC at 105˚C<br>15A LRA; 2.5A FLA 120VAC at 105˚C<br>4A 120VAC at 105˚C |
| | 1 Form C | AgCdO | 3A 250VAC at 40˚C<br>3A 30VDC at 40˚C |
| | | AgNi<br>$AgSnO_2$ | 3A 250VAC at 70˚C<br>3A 30VDC at 70˚C |
| VDE | 1 Form A | AgNi | 5A 250VAC at 85˚C |
| | | AgCdO<br>$AgSnO_2$ | 5A 250VAC at 70˚C |
| | 1 Form C | AgCdO<br>AgNi | 3A 250VAC at 70˚C |

**Notes:** Only some typical ratings are listed above. If more details are required, please contact us.

## ORDERING INFORMATION

| | HF33F / | 012 | -H | S | L | 3 | G | F | (XXX) |
|---|---|---|---|---|---|---|---|---|---|
| **Type** | | | | | | | | | |
| **Coil voltage** | 3, 5, 6, 9, 12, 18, 24, 48VDC | | | | | | | | |
| **Contact arrangement** | | | **H:** 1 Form A | **Z:** 1 Form C | | | | | |
| **Construction** [1] | | | | **S:** Plastic sealed | **Nil:** Flux proofed | | | | |
| **Coil power** | | | | | **L:** Sensitive (Only for 1 Form A) | **Nil:** Standard | | | |
| **Contact material** | | | | | | **T:** $AgSnO_2$ | **3:** AgNi | **Nil:** AgCdO | |
| **Contact plating** | | | | | | | **G:** Gold plated | **Nil:** No gold plated | |
| **Insulation standard** | | | | | | | | **F:** Class F | **Nil:** Class B |
| **Customer special code** | | | | | | | | | |

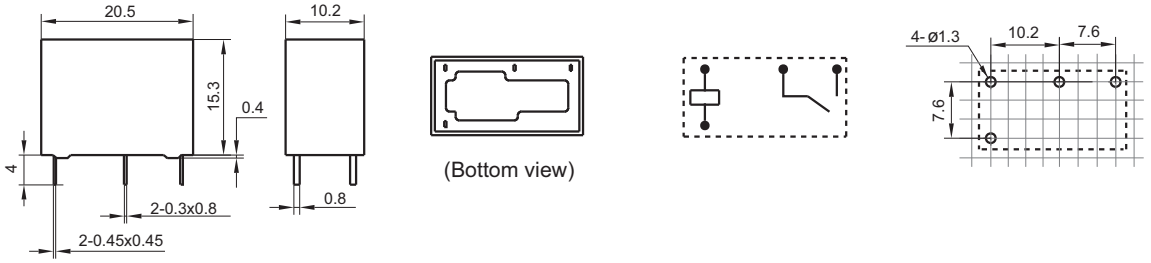
**Notes:** 1) Under the ambience with dangerous gas like $H_2S$, $SO_2$ or $NO_2$, plastic sealed type is recommended; Please test the relay in real applications.
If the ambience allows, flux proofed type is preferentially recommended.
If water cleaning is required after the relay is assembled on PCB, please contact us for suggestion about suitable parts.

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

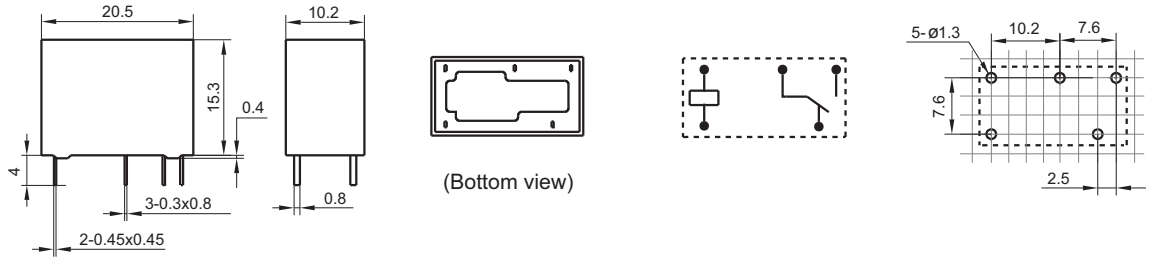
Unit: mm

Outline Dimensions | Wiring Diagram (Bottom view) | PCB Layout (Bottom view)

1 Form A



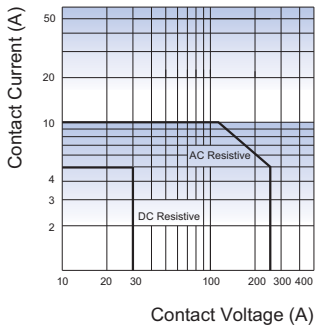

1 Form C



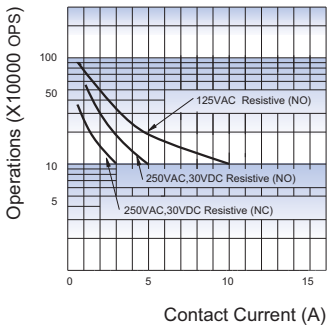

Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.
2) The tolerance without indicating for PCB layout is always ±0.1mm.
3) The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

## CHARACTERISTIC CURVES

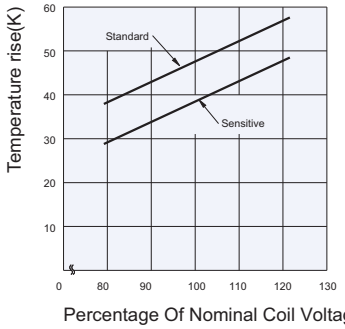
MAXIMUM SWITCHING POWER




ENDURANCE CURVE




COIL TEMPERATURE RISE




### Disclaimer

This datasheet is for the customers' reference. All the specifications are 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.