

# HFV4

# AUTOMOTIVE RELAY



File No.:CH0023315-98



### Features

- 40A continuous contact rating @ 85°C.
- 1 Form A and 1 Form C arrangement.
- Plug-in or PC board terminals.
- Optional mounting bracket.

### CONTACT DATA

|                                 |                         |                                      |
|---------------------------------|-------------------------|--------------------------------------|
| Contact Arrangement             | 1A                      | 1C                                   |
| Initial Contact Resistance Max. | 100mΩ (at1A 6VDC)       |                                      |
| Contact Material                | AgNi, AgSnO             |                                      |
| Contact Rating                  | 14VDC                   | 14VDC                                |
|                                 | 40A                     | 30A(NO)/20A(NC)<br>G:40A(NO)/30A(NC) |
| Max.Carry current               | 60A                     | 60A(NO)/40A(NC)                      |
| Max.Continuous current          | 60A                     | 60A(NO)/40A(NC)                      |
| Max.Make current <sup>(1)</sup> | 120A                    | 120A(NO)/45A(NC)                     |
| Min.Applicable load             | 6VDC, 100mA             |                                      |
| Mechanical life                 | 1 x 10 <sup>7</sup> OPS |                                      |
| Electrical life                 | 1 x 10 <sup>5</sup> OPS |                                      |

### COIL

|            |      |
|------------|------|
| Coil power | 1.6W |
|------------|------|

### COIL DATA

| Nominal Voltage VDC | Pick-up Voltage VDC | Drop-out Voltage VDC | Coil Resistance Ω | Allowable Overdrive VDC |      |
|---------------------|---------------------|----------------------|-------------------|-------------------------|------|
|                     | 20°C                | 20°C                 |                   | 20°C                    | 85°C |
| 6                   | 3.9                 | 0.6                  | 22 ± 10%          | 10.1                    | 7.9  |
| 12                  | 7.8                 | 1.2                  | 85 ± 10%          | 20.2                    | 16.7 |
| 24                  | 15.6                | 2.4                  | 350 ± 10%         | 40.5                    | 31.5 |

**Note(1):**Inrush current for lamp load

### CHARACTERISTICS

|                                   |                           |                      |
|-----------------------------------|---------------------------|----------------------|
| Initial Insulation Resistance     |                           | 100MΩ, 500 VDC       |
| Dielectric Strength               | Between coil and Contacts | 500Vrms              |
|                                   | Between open contacts     | 500Vrms              |
| Operate time (at nomi. Volt.)     |                           | 7ms                  |
| Release time (at nomi. Volt.)     |                           | 5ms                  |
| Temperature rise (at nomi. Volt.) |                           | 75°C max.            |
| Shock Resistance                  | Functional                | 100 m/s <sup>2</sup> |
|                                   | Destructive               | 200m/s <sup>2</sup>  |
| Vibration Resistance              |                           | 1.5mm, 10 to 40Hz    |
| Humidity                          |                           | 98% +40°C            |
| Ambient temperature               |                           | -40°C to +85°C       |
| Termination                       |                           | QC & PCB             |
| Unit weight                       |                           | 31g                  |
| Construction                      |                           | Dust Cover           |



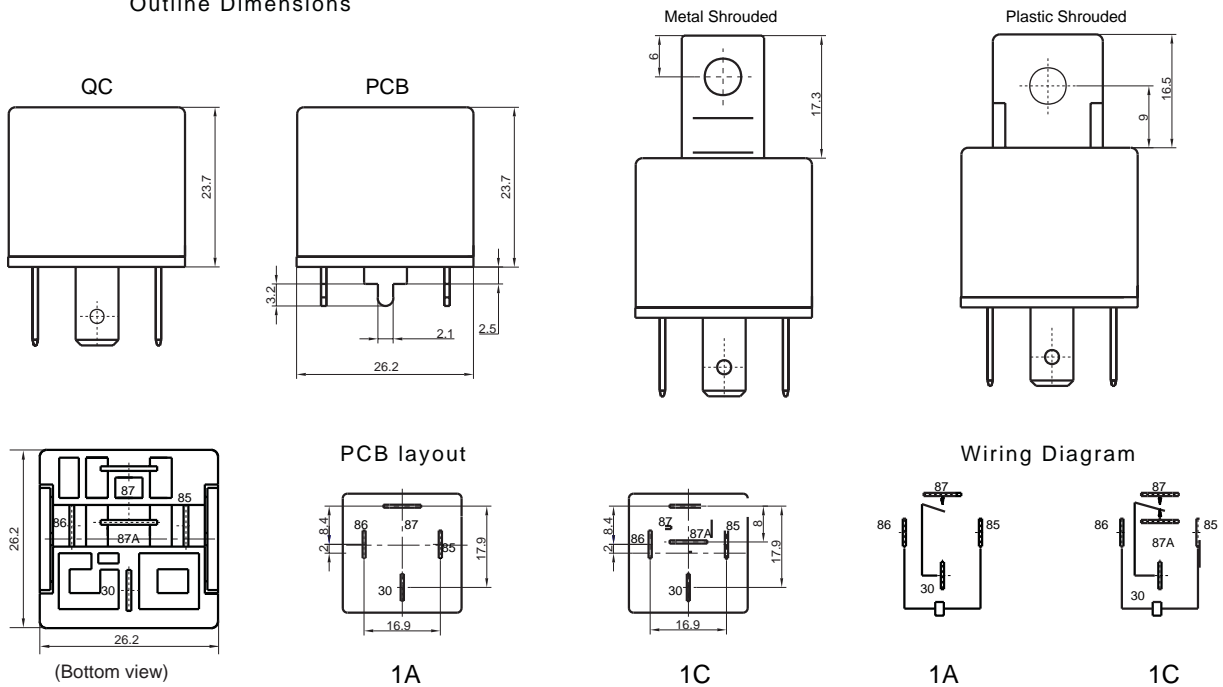
HONGFA RELAY  
ISO9001/QS9000/ISO14000 CERTIFIED

## ORDERING INFORMATION

|                     |   |     |    |   |   |
|---------------------|---|-----|----|---|---|
| Type                | HFV4 /  | 012 | 1H | 1 | G |
| Coil voltage        | 6, 12, 24VDC  |     |    |   |   |
| Contact arrangement | 1H:1 Form A 1Z:1 Form C   |     |    |   |   |
| Version             | 1: QC terminal 2: PC terminal 4: Plastic Shrouded 6: Metal Shrouded |     |    |   |   |
| Contact Material    | Nil: standard G: high capacity                                      |     |    |   |   |

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Outline Dimensions



## CHARACTERISTICS CURVE

