

**FEATURES**

- Applicable to solar photovoltaic inverter
- 80A switching capability
- Low coil holding voltage contributes to saving energy of equipment
- Contact gap: 4.0mm
- Insulation system: Class F
- Dimension: 38 x 33 x 36.8mm ( L x W x H )

**CONTACT DATA**

|                              |                                                      |                                                       |
|------------------------------|------------------------------------------------------|-------------------------------------------------------|
| Contact gap                  | 3mm                                                  | 4mm                                                   |
| Contact arrangement          | 1A                                                   |                                                       |
| Contact resistance (initial) | 10 mΩ(20A 6VDC)                                      |                                                       |
| Contact rating (Res.load)    | Making 20A<br>Carrying 65A<br>Breaking 20A<br>400VAC | Making 30A<br>Carrying 80A<br>Breaking 30A<br>1000VAC |
| Max. switching voltage       | 400VAC                                               | 1000VAC                                               |
| Max. Switching current       | 65A                                                  | 80A                                                   |
| Max. Switching power         | 18005VA                                              | 30000VA                                               |
| Contact material             | AgNi, AgSnO <sub>2</sub>                             |                                                       |
| Termination                  | PCB                                                  |                                                       |
| Construction                 | Flux proofed                                         |                                                       |

**CHARACTERISTICS**

|                       |                                                                                                        |
|-----------------------|--------------------------------------------------------------------------------------------------------|
| Insulation resistance | 1000MΩ at 500VDC                                                                                       |
| Dielectric strength   | 5000VAC, 1 min. between coil to contacts<br>2000VAC, 1 min. between open contacts                      |
| Surge voltage         | 10kV(1.2/50μs) between coil to contacts                                                                |
| Operate time          | Max. 30 ms (nominal voltage)                                                                           |
| Release time          | Max. 10 ms (nominal voltage)                                                                           |
| Vibration resistance  | 10-55Hz, 1.5mm DA                                                                                      |
| Temperature rise      |                                                                                                        |
| -Contact gap 3mm      | 70Kmax.(contact load current 65A,50% to 60% rated voltage excitation, at 85°C)                         |
| -Contact gap 4mm      | 70Kmax.(contact load current 80A,50% to 60% rated voltage excitation, at 85°C)                         |
| Shock resistance      | Functional:98m/s <sup>2</sup><br>Destructive:980m/s <sup>2</sup>                                       |
| Humidity              | 5% to 85% RH                                                                                           |
| Ambient temperature   | -40°C ~ 85°C(Apply holding voltage to coil)                                                            |
| Life expectancy       |                                                                                                        |
| - Mechanical          | 1 x 10 <sup>6</sup> ops                                                                                |
| - Electrical          |                                                                                                        |
| -Contact gap 3mm      | 3x10 <sup>4</sup> ops(Making20A,Carrying 65A,Breaking20A,400VAC,Resistive load,at 85°C,1s on 9s off,)  |
| -Contact gap 4mm      | 3x10 <sup>4</sup> ops(Making30A,Carrying 80A,Breaking30A,1000VAC,Resistive load,at 85°C,1s on 9s off,) |

COIL SPECIFICATIONS -(Contact gap)

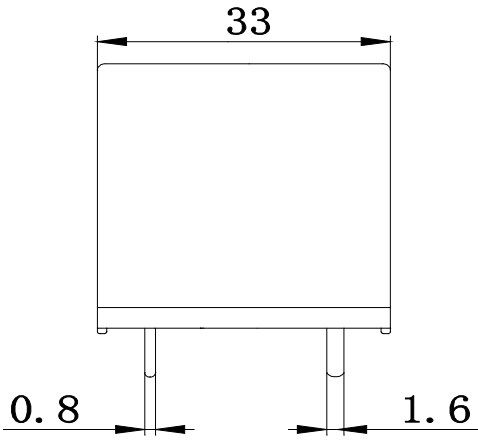
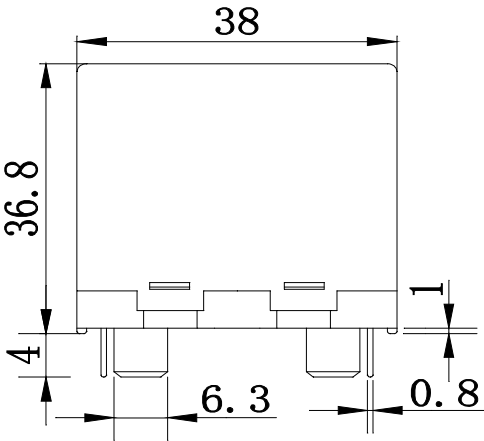
| Nominal voltage (VDC) | Pick-up voltage VDC(Max.) |      | Drop-out voltage VDC(Min.) | Nominal current (mA±10%) | Coil resistance (Ω±10%) | Power consumption(W) | Max. allowable voltage(VDC) |
|-----------------------|---------------------------|------|----------------------------|--------------------------|-------------------------|----------------------|-----------------------------|
|                       | 3mm                       | 4mm  |                            |                          |                         |                      |                             |
| 6                     | 4.2                       | 4.5  | 0.6                        | 320                      | 18.8                    | 1.92                 |                             |
| 9                     | 6.3                       | 6.75 | 0.9                        | 213                      | 42.2                    | 1.92                 |                             |
| 12                    | 8.4                       | 9    | 1.2                        | 160                      | 75                      | 1.92                 |                             |
| 24                    | 16.8                      | 18   | 2.4                        | 80                       | 300                     | 1.92                 |                             |

ORDERING INFORMATION

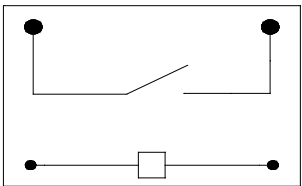
|              |              |            |              |          |                                    |          |                   |          |                     |           |
|--------------|--------------|------------|--------------|----------|------------------------------------|----------|-------------------|----------|---------------------|-----------|
| <u>ME-76</u> | -            | <u>012</u> | -            | <u>H</u> |                                    | <u>T</u> |                   | <u>F</u> |                     | <u>40</u> |
| Model No.    | Coil Voltage |            | Contact Form |          | Contact Material                   |          | Insulation System |          | Contact gap         |           |
| ME-76        | 6VDC-24VDC   |            | H: 1A        |          | Nil: AgNi<br>T: AgSnO <sub>2</sub> |          | F: Class F        |          | Nil: 3mm<br>40: 4mm |           |

Dimensions(unit:mm)

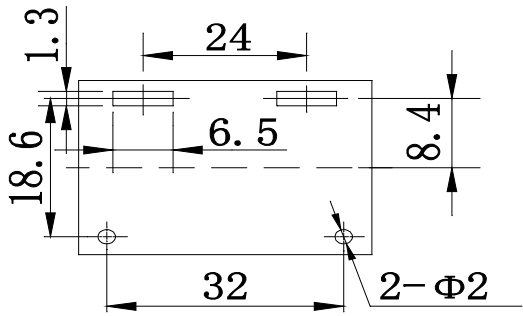
Tolerance: ±0.1mm



SCHEMATIC



PCB LAYOUT



Disclaimer: All the specifications are subject to change without notice.