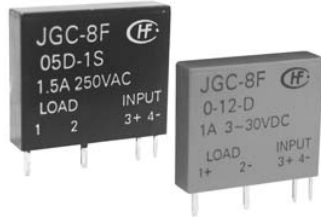


# JGC-8F (Output module)

# SOLID STATE RELAY



### Features

- I/O modules for interface between CPU
- External input devices or loads.
- High isolation by employing photo-coupled devices (between input and output:2500V rms).
- Ultra slim and light weight:  
--size:20mmx17mmx5mm
- Printed circuit board mount

## OUTPUT MODULE

| Item                        |                                | AC Output module                         | DC Output module  | Remarks                 |
|-----------------------------|--------------------------------|--|-------------------|-------------------------|
| Nominal Voltage(DC)         |                                | 3V, 5V, 12V, 24V                         | 5V, 12V, 24V      |                         |
| INPUT side                  | Operate Voltage Range          | ±20% of nominal voltage                  |                   |                         |
|                             | Must Operate Voltage           | 80% of nominal voltage                   |                   |                         |
|                             | Must Release Voltage           | Minimum 1V                               |                   |                         |
|                             | Maximum Input Current          | Maximum 15mA(at 120% of Nominal Voltage) |                   |                         |
|                             | Load Voltage Range             | 24 to 265Vrms                            | 3 to 30Vd.c.      |                         |
|                             | Maximum Load Current           | 1.0Arms                                  | 1.0A              | see CHARACTERISTIC DATA |
| OUTPUT side                 | 1 Cycle Surge Current          | 15A(60Hz)                                | 3A(10ms)          |                         |
|                             | Max. Off-State Leakage Current | 1.5mArms                                 | 0.1mA(at 30Vd.c.) |                         |
|                             | Max. On-state Voltage Drop     | 1.2Vrms                                  | 1.2V              | at max. load current    |
| Maximum Operate Time        |                                | 1ms                                      |                   |                         |
| Maximum Release Time        |                                | 1/2 cycle+1ms                            | 1ms               |                         |
| Insulation Resistance       |                                | Minimum 1000M*(at 500Vd.c.)              |                   | for input-output        |
| Dielectric Strength         |                                | 2500Vrms 1minute                         |                   |                         |
| Operating Temperature Range |                                | -30°C to +85 °C                          |                   |                         |
| Storage Temperature         |                                | -40°C to +100 °C                         |                   |                         |
| Case Color                  |                                | Black                                    | Red               |                         |
| Weight                      |                                | 3.5g max.                                |                   |                         |

## ORDERING INFORMATION

output module

|  |                 |          |           |          |            |
|--|-----------------|----------|-----------|----------|------------|
|  | <b>JGC-8F /</b> | <b>O</b> | <b>12</b> | <b>D</b> | <b>XXX</b> |
| <b>Type</b>  |                 |          |           |          |            |
| <b>Module Type</b> O : Output Module   |                 |          |           |          |            |
| <b>Nominal Voltage(input side)</b> 03:3VAC (only AC type)    05:5VAC<br>12:12VAC    24:24VAC |                 |          |           |          |            |
| <b>Output Voltage</b> A: AC type    D: DC type   |                 |          |           |          |            |
| <b>Customer special request code</b>   |                 |          |           |          |            |

Solid State Relays JGC-8F

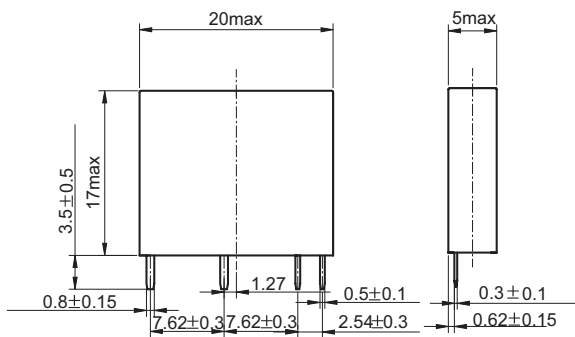
## PRECAUTIONS

1. Soldering must be completed within 10 seconds at 260 °C or less or within 5 seconds at 350 °C or less.
2. To output module, the SSR case serves to dissipate heat. Install the relays so that they are adequately ventilated. If poor ventilation is unavoidable, reduce the load current by half.
3. When using the JGC-8F/O ( ) A series for an AC load with a peak voltage of more than 450V, connect the load terminals of the relay to an inrush absorber (varistor) . The recommended varistor voltage, 440 to 470V.

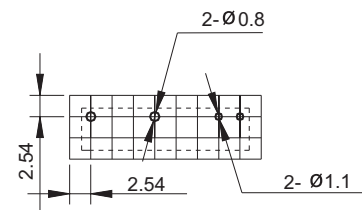
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

### output module

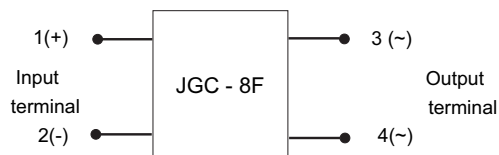
Dimensions



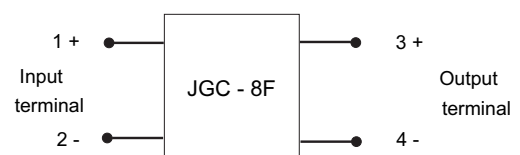
PCB mounting  
hole layout  
(BOTTOM VIEW)



JGC-8F/O ( ) A type



JGC-8F/O ( ) D type



## CHARACTERISTICS CURVE

Figure 1 Maximum load current vs. ambient temperature

