

JGX-39F

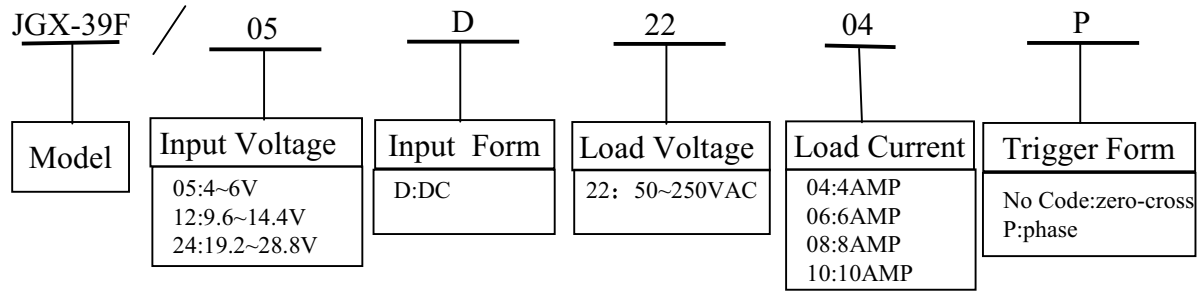
| | | |
|---|--|----------------|
|  ISO 9001 Certified | Solid State Relay AC250V 4/6/8/10Amp | JGX-39F |
|---|--|----------------|



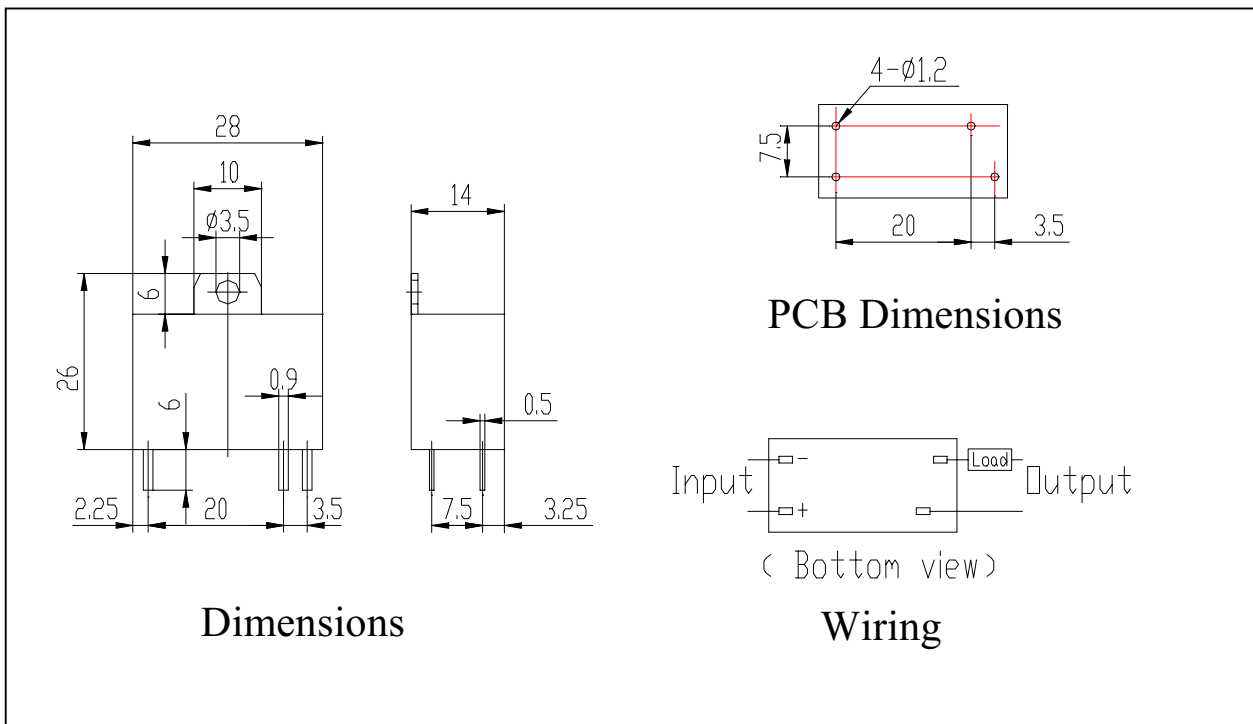
- Photo isolation
- 600V blocking voltage
- 2000V isolation
- Zero voltage turn-on
- Built-in RC snubber
- PCB mount

| | | | | | | |
|-------------------------|--------------------------------|-------|-------------------|-----|------|------|
| INPUT | Voltage | 05D | 4 to 6 VDC | | | |
| | | 12D | 9.6 to 14.4VDC | | | |
| | | 24D | 19.2 to 28.8VDC | | | |
| | Turn-on voltage | 05D | 3.5VDC | | | |
| | | 12D | 8.4VDC | | | |
| | | 24D | 16.8VDC | | | |
| Current | | 15 mA | | | | |
| Turn-off Voltage | | 1 VDC | | | | |
| OUTPUT | Voltage Range | | 50 to 250 VAC | | | |
| | Current Rating(with heat sink) | | 4A | 6A | 8A | 10A |
| | Surge(Non repetitive) | | 60A | 90A | 120A | 150A |
| | Voltage Drop | | 1.5 VAC | | | |
| | Minimum Load Current | | 100 mA | | | |
| | Leakage current | | 3mA | | | |
| | Zero voltage switching | | Yes | | | |
| | Dv/Dt | | 100 v/us | | | |
| | Frequency Range | | 47~70 Hz | | | |
| | Time turn-on | | 1/2 of cycle+1ms | | | |
| | Time turn-off | | 1/2 of cycle+1ms | | | |
| General Characteristics | Dielectric strength | | 2000 VAC,1min | | | |
| | Insulation resistance | | 100MΩ min, 500VDC | | | |
| | Ambient temp.range(Operating) | | -30 to +80℃ | | | |
| | Termination | | PCB terminal | | | |
| | Weight | | Approx. 12g | | | |
| | Construction | | Fully-sealed | | | |

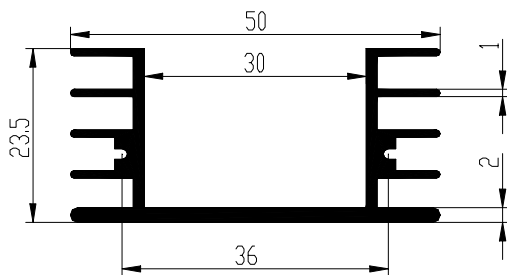
■ ORDER DESIGNATION



■ OUTLINE DIMENSIONS , MOUNTING AND WIRING



■ SRX-YC HEAT-SINK SECTION DIMENSIONS



■ INSTALLATION

CLOSE MOUNTING

When mounting Solid-state relays(SSRs)side by side, provide a space equivalent to the width of a single SSR between two adjacent SSRs.Other,reduce the current flow to 1/2 to 1/3 of the rated current.

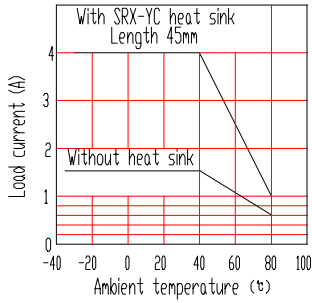
HEAT SINK MOUNTING

To mount an SSR in a heat sink, apply a heat conductive grease to the metal back surface of the SSR.Press the SSR firmly onto the heat sink to ensure a good seal.Screw the SSR down to the heat sink.

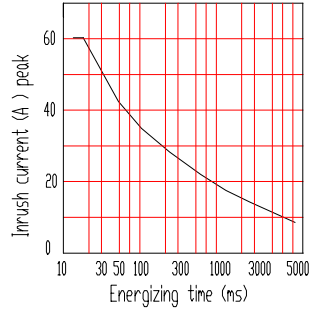
■ JGX-39F CHARACTERISTIC DATA

■ JGX-39F 4A CHARACTERISTIC DATA

Load Current vs. Ambient Temp.

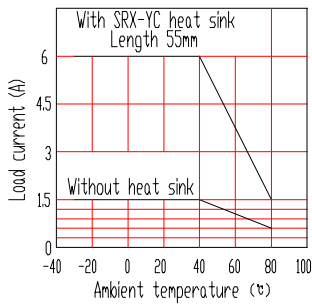


Surge Current Resistivity

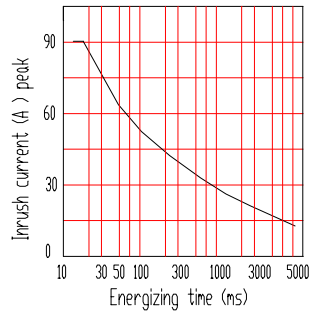


■ JGX-39F 6A CHARACTERISTIC DATA

Load Current vs. Ambient Temp.

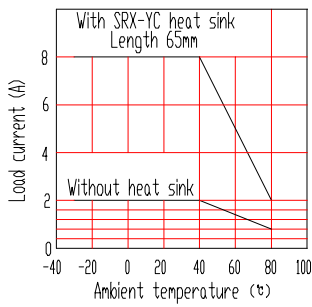


Surge Current Resistivity

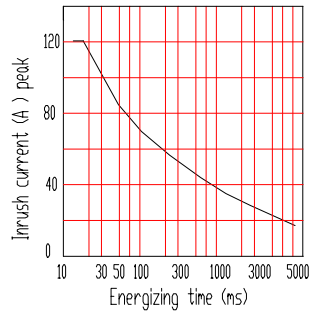


■ JGX-39F 8A CHARACTERISTIC DATA

Load Current vs. Ambient Temp.

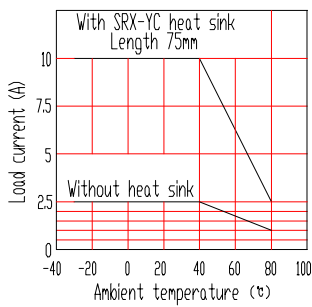


Surge Current Resistivity

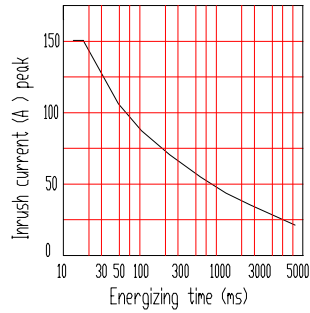


■ JGX-39F 10A CHARACTERISTIC DATA

Load Current vs. Ambient Temp.



Surge Current Resistivity



■ PRECAUTIONS

LOAD CONNECTION

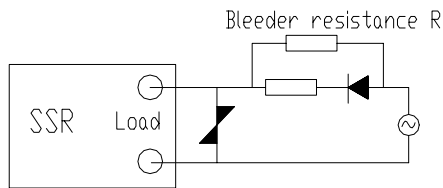
Before connecting a load that generates a high surge current, such as a lamp load, to the SSR, make sure that the SSR can withstand the surge current of the load.

The product data sheet shows the non-repetitive peak value of the surge current that flows through the SSR. Normally, use 1/2 the non-repetitive peak surge current as the standard value. If a surge current exceeding that value is expected, connect a quick-blowing fuse to protect the SSR.

For an AC load, use a power supply rated at 50 or 60 Hz. The maximum input frequency is 10 Hz.

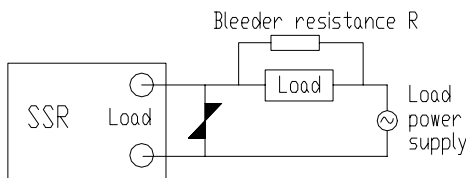
HALF-WAVE RECTIFIER LOADS

If the SSR is not provided with a zero cross function, a half-wave rectifier load can be switched with no problem. If the SSR is equipped with a zero cross function, allow about 20% of the load current to flow through the SSR.



Note: Connect bleeder resistor R.

LOW-CAPACITY LOADS



Note: connect bleeder resistor R.

CAPACITIVE LOADS

The supply voltage plus the charge voltage of the capacitor is applied to both ends of the SSR when it is OFF. Therefore, use an SSR model with an input voltage rating twice the size of the supply voltage.

Limit the charge current of the capacitor to less than half the peak surge current value allowed for the SSR.

■ NOTES

Soldering must be completed within 10 seconds at 260°C maximum..

To use the SSR output for phase control, select a model that doesn't incorporate a zero-cross function.

The load terminals are internally connected to a snubber circuit that absorbs noise. However, if wiring from these terminals is laid with or placed in the same duct as high-voltage or power lines, noise may be induced, causing the SSR to operate irregularly or malfunction.

The input circuitry does not incorporate a circuit protecting the SSR against damage from reverse polarity connection. Make sure that the polarity is correct when connecting the input lines.

When using the JGX-39F for an AC load with a peak voltage of more than 450V, connect the load terminals of the relay to a inrush absorber.

When testing dielectric strength, apply voltage between input and output (Input and output terminals shall be shorted respectively.)