

JGX-31F



ISO 9001 Certified

Solid State Relay

AC250/380V 10/20Amp

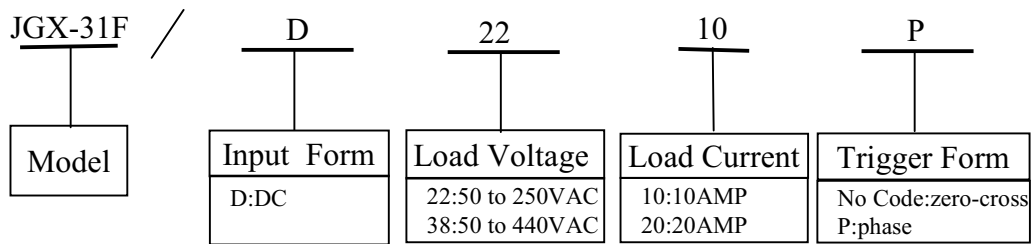
JGX-31F



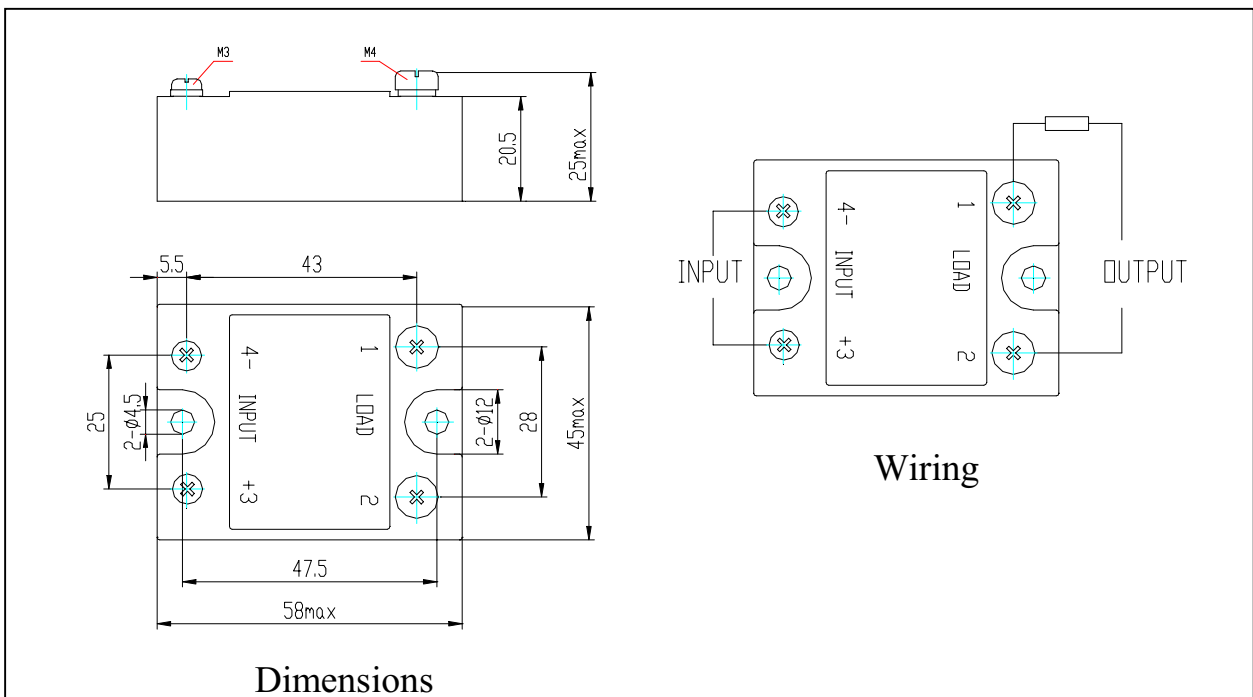
- Photo isolation
- 600V/800V blocking voltage
- Both “Zero Voltage” & phase controllable “Random” Switching versions
- Built-in RC snubber
- Screw terminal

INPUT	Voltage	5 to 32 VDC			
	Current	15 mA			
	Turn-on voltage	3 to 32 VDC			
	Turn-off voltage	1 VDC			
OUTPUT	Voltage Range	50 to 250 VAC		50 to 440 VAC	
	Current Rating(with heat sink)	10A	20A	10A	20A
	Surge(Non repetitive)	150A	200A	150A	200A
	Voltage Drop	1.5VAC	1.6VAC	1.5VAC	1.6VAC
	Leakage current	3mA	5mA	5mA	8mA
	Minimum Load Current	100 mA			
	Zero voltage switching	Yes			
	Dv/Dt	100 v/us			
	Frequency Range	47 to 70 Hz			
	Time turn-on	1/2 of cycle+1ms			
	Time turn-off	1/2 of cycle+1ms			
General Characteristics	Dielectric strength	4000 VAC,1min			
	Insulation resistance	1000MΩ min. At 500VDC			
	Ambient temp.range(Operating)	-30 to +80°C			
	Termination	Screw terminal			
	Weight	Approx. 90g			
	Construction	Fully-sealed			

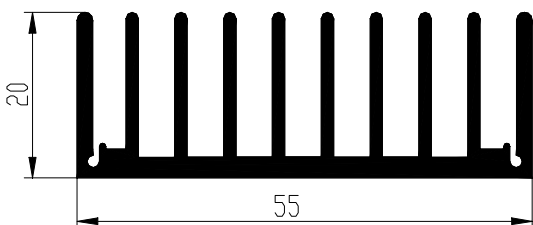
■ ORDER DESIGNATION



■ OUTLINE DIMENSIONS , MOUNTING AND WIRING



■ SRX-YAS 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.

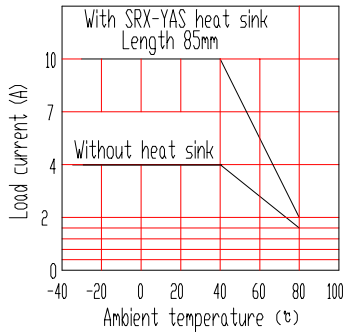
HEAT SINK MOUNTING

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.

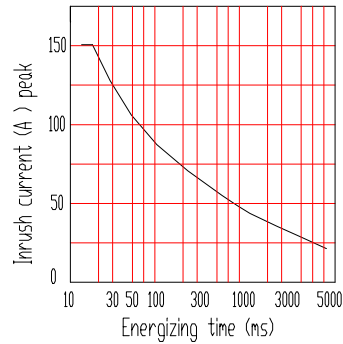
■ JGX-31F CHARACTERISTIC DATA

■ JGX-31F 10A CHARACTERISTIC DATA

Load Current vs. Ambient Temp.

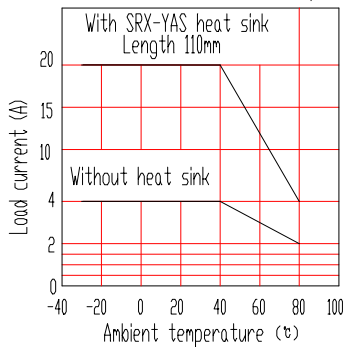


Surge Current Resistivity

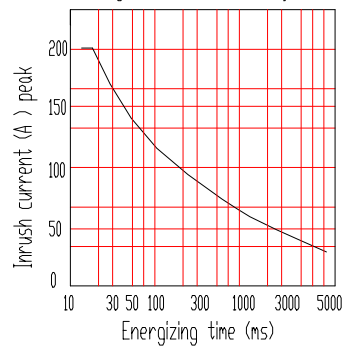


■ JGX-31F 20A CHARACTERISTIC DATA

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.

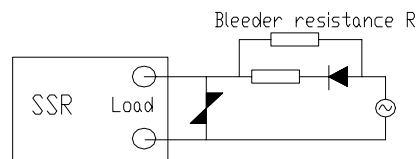
CAPACITIVE LOADS

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.

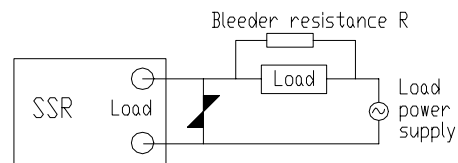
HALF-WAVE RECTIFIER LOADS

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.

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