

JGX-41F

SOLID STATE RELAY



Features

- Input: DC control
- Double SCR AC output or TRIAC AC output
- Dielectric Strength: 4000VAC,1min
- DBC Board
- Printed circuit board mount

INPUT

Input voltage	1D	3-15VDC
Input voltage	2D	15-32VAC
Must operate voltage	1D	3VDC max.
Must operate voltage	2D	15VDC max.
Must release voltage		1.0VDC min.

OUTPUT

Load voltage range (@47-63Hz)		48 - 264VAC (at D24 model)
		48 - 440VAC (at D38 model)
Load current range		0.1- 16A (see Fig.1)
Max.Surge current ¹ (10ms)		250Apk (see Fig.1)
Max.off-state leakage current (@ Rated voltage)		1.5mA
Max.on-state voltage drop		1.5V
Max. Turn-on time	Zero-cross	10ms
	random	1ms
Max turn-off time		10ms
Transient overvoltage		600Apk max. (at D24 model)
		800Apk max. (at D38 model)
Min. off-state dv/dt		200V/s min.
Min. power factor		0.5

GENERAL

Dielectric strength (input-output)	4000VAC 1min. 50/60HZ 1min.
Insulation resistance	1000MΩ,min. 500VDC
Vibration	Double range 1.5mm 10 - 55Hz
Ambient operating temperature range	-30°C to +80°C
Ambient storage temperature range	-30°C to +100°C
Ambient humidity	45% to 85%
weight	Max. 15g

PRECAUTIONS

1. Soldering must be completed within 10 seconds at 260°C or less or within 5 seconds at 350°C or less.
2. 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. The input circuitry does not incorporate a circuit protecting the SSR from being damaged due to a reversed connection. Make sure that the polarity is correct when connecting the input lines.
4. When using the JGX-41F 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.
5. The load terminals are internally connected to a snubber circuit that absorb 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.

DESCRIPTION

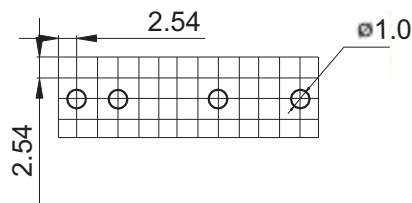
JGX-41F pin-out is compatible with standard OAC type I/O modules, and all models are available with random turn-on as an alternative to zero-cross turn-on. The JGX-41F SSR range offers a choice of 240 ,380Vac versions. Input Voltage specifications have 3-15Vd.c. and 15-32Vd.c.. All models include an internal snubber.

ORDERING INFORMATION

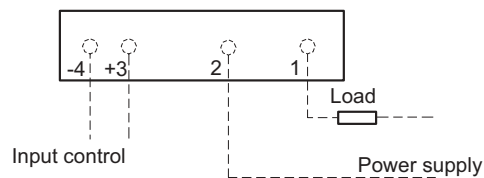
Type	JGX-41F / 2D 24 Z 05 T
Input voltage range	1D: 3-15Vd.c. 2D: 15-32Vd.c.
Output voltage	24: 240Vd.c. 38: 380Vd.c.
Zero Cross Function	Z: Zero cross turn-on P: Random turn-on
Load current	03: 3Amp 05: 5Amp 08: 8Amp 16: 16Amp
Output Type	S: SCR output T: TRIAC output

OUTLINE DIMENSIONS, WIRING DIAGRAM AND MOUNTING HOLES

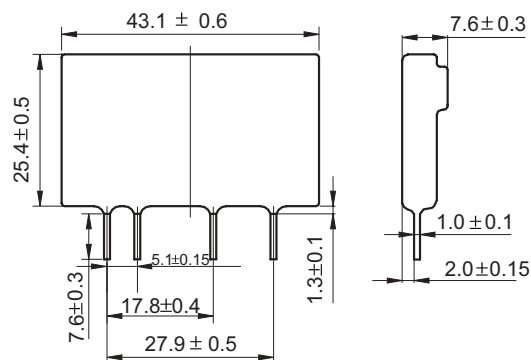
Mount dimension



Wiring diagram



Dimensions(mm)



CHARACTERISTICS CURVE

Figure 1 Maximum load current vs. ambient temperature

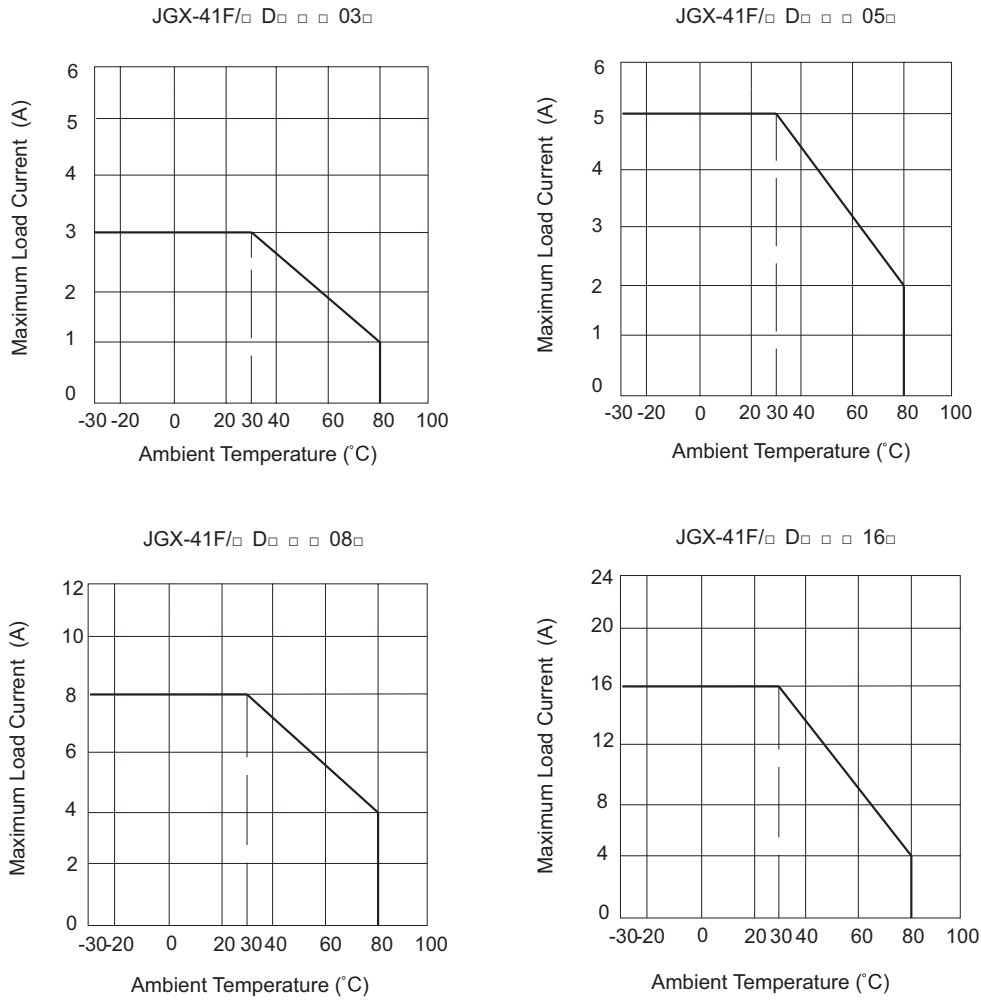
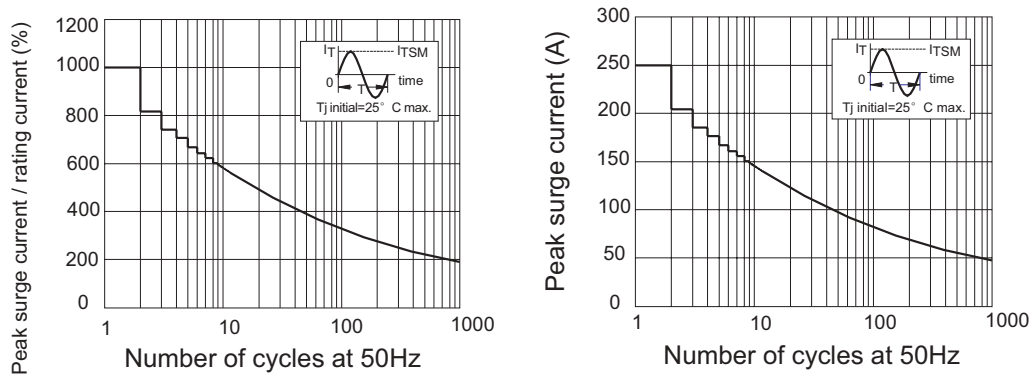


Figure 2 Maximum permissible non-repetitive peak surge current vs. Number of cycles



TRIAC output Maximum permissible non-repetitive peak surge current vs. Number of cycles

SCR Output Maximum permissible non-repetitive peak surge current vs. Number of cycles