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 to 15VDC		
Input voltage	2D	15 to 32VDC		
Must operate voltage	1D	Max. 3VDC		
Must operate voltage	2D	Max. 15VDC		
Must release voltage		Min 1.0VDC		

OUTPUT		
Load voltage range (at 47 to 63Hz)		48 to 264VAC (@ 240VAC rated voltage)
		48 to 440VAC (@ 380VAC rated voltage)
Load current range		0.1 to 5A (see Fig.1)
Max.Surge current (10ms)		250Apk (see Fig.1)
Max.off-state leakage current (at 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		Max. 600Vpk (@ 240VAC rated voltage)
		Max. 800Vpk (@ 380VAC rated voltage)
Min. off-state dv/dt		200V/ µ s
Min. power factor		0.5

DESCRIPTION

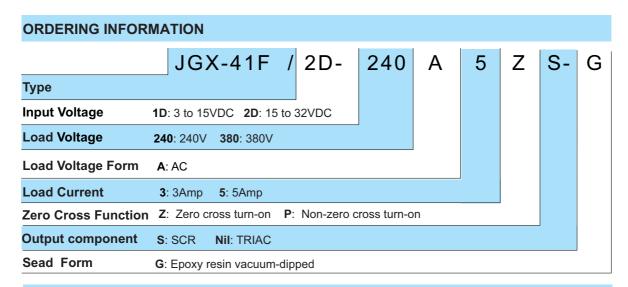
JGX-41F pin-out is compatible with standard OAC type I/O modules, and all models are available with random turn-on as an alternative to zero-cross turn-on. The JGX-41F SSR range offers a choice of 240 ,380Vac versions. Input Voltage specifications have 3-15Vd.c. and 15-32Vd.c.. All models include an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

GENERAL	
Dielectric strength (input-output)	4000VAC 1min. 50/60HZ 1min.
Insulation resistance	1000MΩ,min. 500VDC
Vibration	Double amplitude 1.5mm, 10 to 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

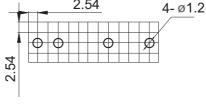
- Soldering must be completed within 10 seconds at 260°C or less or within 5 seconds at 350°C or less.
- The SSR case serves to dissipate heat. Install the relays so that they are adequately ventilated. If poor ventilation is unavoidable, reduce the load current by half.
- 3. The input circuitry does 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 highvoltage or power lines, noise may be induced, causing the SSR to operate irregularly or malfunction.



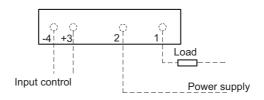


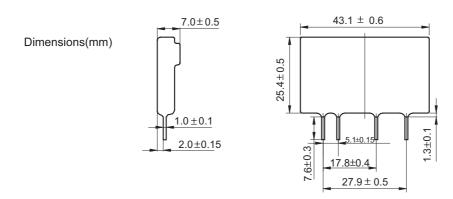
OUTLINE DIMENSIONS, WIRING DIAGRAM AND MOUNTING HOLES





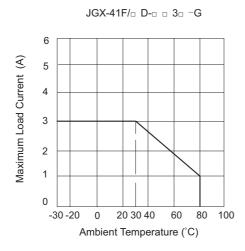
Wiring diagram





CHARACTERISTICS CURVE

Figure 1 Maximum load current vs. ambient temperature



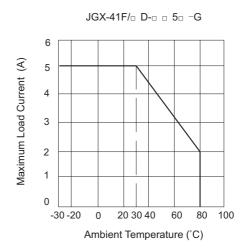
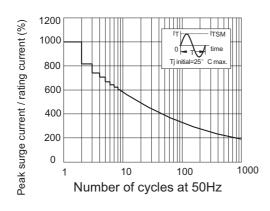
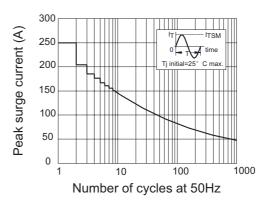


Figure 2 Maximum permissible non-repetitive peak surge current vs. Number of cycles





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

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