

KS32 (AC output)

Solid State Relay

CE

cRU US

Certificate NO.:E365647



Vertical



Horizontal

Features

- PCB assembly or socket mount
- Photoelectric isolation
- Pin-compatible with standard package EMR
- TTL and CMOS compatible

DESCRIPTION

This is a SPST-NO SSR with small dimensions provides AC output switching for PCB assembly or socket mount occasion, especially for some high density mounting applications. With DC input control, compatible with 5VDC, 12VDC, 24VDC and 60VDC logic systems. The relays provide 2500Vrms opto-isolation between input and output.

The relays' pin are full compatibility to the electromechanical standard relay, so very convenient for user install and use.

PRECAUTIONS

- 1.Soldering must be completed within 10s at 260°C or less or within 5s 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,the load current must be reduced. Please refer to the curve of Max. Load current Vs. Ambient Temperature.
- 3.If the output transient voltage exceeds the nominal value, a varistor should be mounted on the SSR output terminal in parallel to prevent the relay being breakdown. 240VAC output relays are suggested to use 470VDC varistors.
- 4.Please do not use the relay beyond the descriptions in the datasheet.

Input Parameters (Ta = 25°C)

Control voltage range	5	(4 ~ 6)VDC	
	12	(9.6 ~ 14.4)VDC	
	24	(19.2 ~ 28.8)VDC	
	60	(48 ~ 72)VDC	
Must turn-on voltage	5	4VDC	
	12	9.6VDC	
	24	19.2VDC	
	60	48VDC	
Must turn-off voltage	Zero cross	5	1VDC
		12	3VDC
		24	10VDC
		60	20VDC
	Random	1VDC	
Max.input current		25mA	
Max.reverse protection voltage	5	-6VDC	
	12	-14.4VDC	
	24	-28.8VDC	
	60	-72VDC	

Output Parameters (Ta = 25°C)

Load voltage range	(48 ~ 280)VAC
Max.transient voltage	600Vpk
Load current range	□□-□□□1-□ (0.1 ~ 1)A
	□□-□□□2-□ (0.1 ~ 2)A
Max.surge current (10ms)	□□-□□□1-□ 30A
	□□-□□□2-□ 80A
Max.on-state voltage drop	1.2Vr.m.s.
Max.I ² t for fusing (10ms, A ² s)	□□-□□□1-□ 4.5
	□□-□□□2-□ 32
Max.turn-on time	Zero cross: 1/2cycle+1ms
	Random: 1ms
Max.turn-off time	1/2cycle+1ms
Frequency range	(47 ~ 63)Hz
Min.off-state dv/dt	100V/μs
Max.off-state leakage current	1.5 mA



ISO9001 ISO14001

GENERAL (Ta = 25°C)

Dielectric strength (input to output)	2500VAC 1min	
Insulation resistance	1000MΩ (500VDC)	
Max.capacitance (input to output)	5pF	
Vibration resistance	10 Hz ~ 55Hz 1.5mm DA	
Ambient temperature	Operating temperature	-30°C ~ 80°C
	Storage temperature	-30°C ~ 100°C
Ambient humidity	45% ~ 85% RH	
Unit weight	Horizontal type approx 11g,vertical type approx 4g	
Shock resistance	Acceleration980m/s ² , continuous surge 6ms	

ORDERING INFORMATION

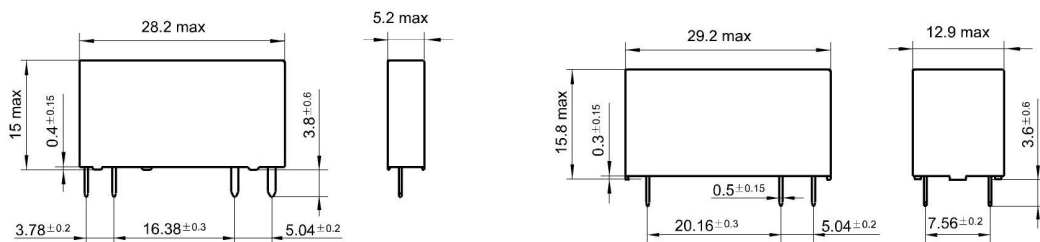
Type	KS32/ 24- 24 Z 1 -Y H (XXX)
Control voltage	5: 5VDC 12: 12VDC 24: 24VDC 60: 60VDC
Load voltage	24: 240VAC
Zero cross function	Z:Zero cross turn-on P:Random turn-on
Load current	1: 1A 2: 2A
Overvoltage protection	Y:With varistor protection Nil: Without overvoltage protection
Mounting mode	H: Horizontal type Nil: Vertical type
Customer special code	

Notes: Only below specifications available:KS32/□□-24Z1, KS32/□□-24Z2, KS32/□□-24Z2-H, KS32/□□-24P1, KS32/□□-24P2, KS32/□□-24P2-H, KS32/□□-24Z1-Y*

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT

Unit:mm

Outline Dimensions

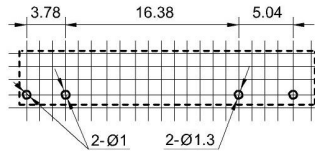


Vertical Type

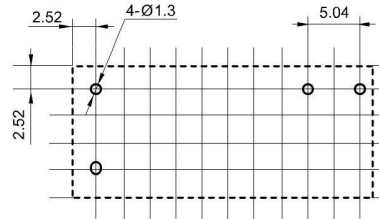
Horizontal Type

PCB and Socket Layout

PCB Layout
(Bottom view)

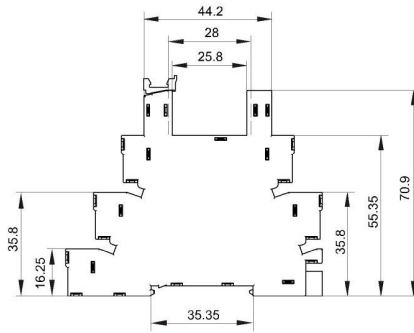


Vertical Type

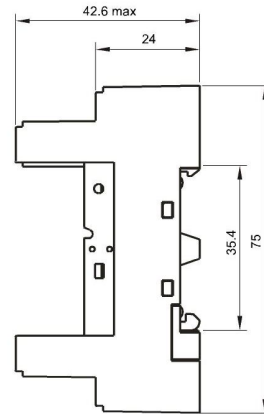


Horizontal Type

Socket Layout

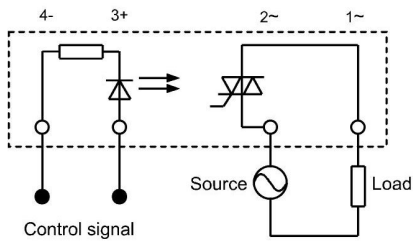


Socket Model:41F-1Z-C2-5

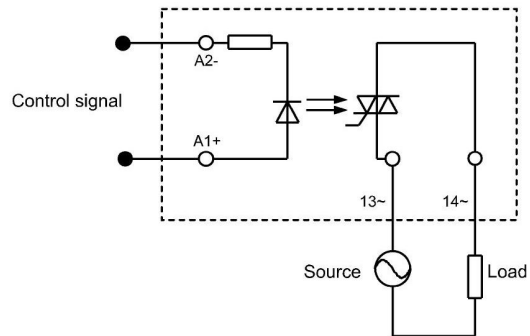


Socket Model:14FF-2Z-C2

Wiring Diagram



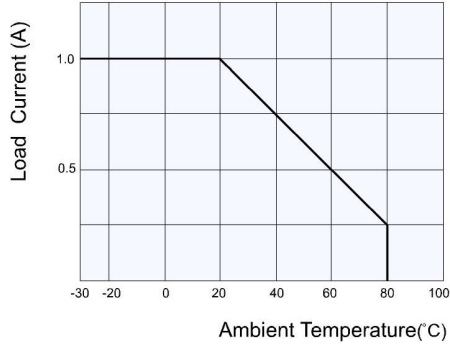
Vertical Type



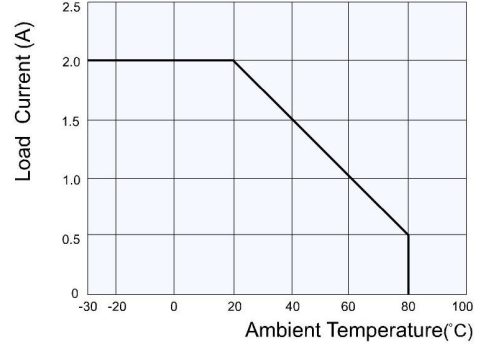
Horizontal Type

CHARACTERISTIC CURVES

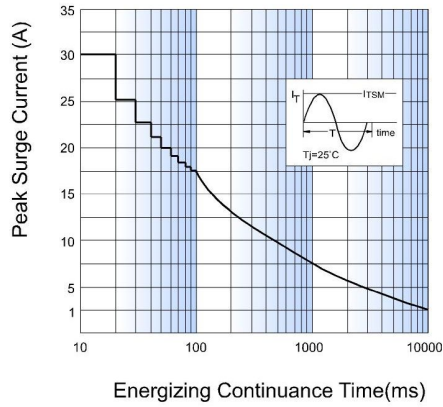
Max. Load Current vs. Ambient Temperature(1A)



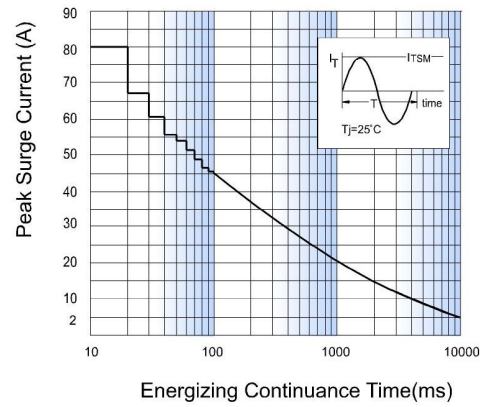
Max. Load Current vs. Ambient Temperature(2A)



Max. Permissible Non-repetitive Peak Surge Current vs. Continuance Time(1A)



Max. Permissible Non-repetitive Peak Surge Current vs. Continuance Time(2A)



Disclaimer:

This datasheet is for the customers' reference. All the specifications are subject to change without notice. Jinxinrong could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Jinxinrong for the technical service. However, it is the user's responsibility to determine which product should be used only.