



DESCRIPTION

KS27 is a set of SPST-NO AC output PCB mount SIP type SSR, which can be used in electromagnetic valves, stage lighting control, motor reversing control, heaters, vending machines, medical equipment, elevators, electric control doors and other various applications.

FEATURES

- ◆ Excellent thermal designing, high load capacity
- ◆ Photoelectric isolation
- ◆ Dielectric strength 4000V
- ◆ Built-in RC snubber circuit
- ◆ Single-in-line PCB mount

PRECAUTIONS

1. Soldering must be completed within 10s at 260°C or 5s at 350°C.
2. The SSR's case serves to dissipate the heat generated by the SSR itself. If poor ventilation is unavoidable, the load current must be derated. Please refer to the curve of Max. Load Current vs. Ambient Temperature for derating.
3. Please do not use the SSR exceeding the limitation which is specified on this datasheet.

SELECTION GUIDE

KS27/	12-	24	Z	2	(XXX)
Type	Control voltage	Load voltage	Switching mode	Load current	Customer special code
	5: 5VDC 12: 12VDC 24: 24VDC	24: 240VAC 38: 380VAC	Z: Zero-cross P: Random	2: 2A 3: 3A	

INPUT SPECIFICATIONS (Ta=25°C)

Control voltage range	5	4 ~ 6VDC
	12	9.6 ~ 14.4VDC
	24	19.2 ~ 28.8VDC
Must turn-on voltage	5	4VDC
	12	9.6VDC
	24	19.2VDC
Max. input current		25mA
Input resistance	5	250Ω
	12	720Ω
	24	1.64kΩ
Must turn-off voltage		1VDC

OUTPUT SPECIFICATIONS (Ta=25°C)

	□-24□2	□-38□2	□-24□3	□-38□3
Load voltage range	48 ~ 280VAC	48 ~ 440VAC	48 ~ 280VAC	48 ~ 440VAC
Max. transient voltage	600Vpk	800Vpk	600Vpk	800Vpk
Load current range	0.1 ~ 2A		0.1 ~ 3A	
Max. surge current (10ms)	60Apk		80Apk	
Max. I ² t for fusing (10ms, A ² s)	18		32	
Max. on-state voltage drop	1.5Vr.m.s.			
Max. off-state leakage current	5mA			
Min. off-state dv/dt	200V/μs			
Max. turn-on time	Zero-cross:1/2cycle+1ms; Random:1ms			
Max. turn-off time	1/2 Cycle+1ms			
Frequency range	47 ~ 63Hz			
Min. power factor	0.5			

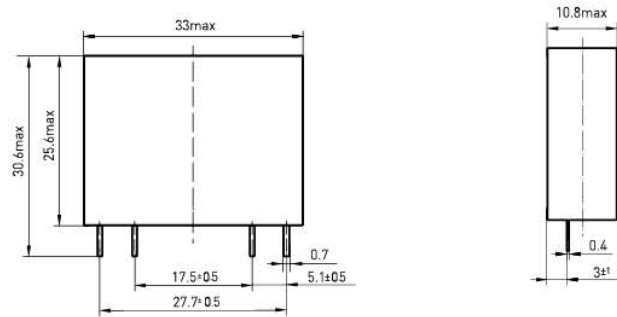
GENERAL SPECIFICATIONS (Ta=25°C)

Dielectric strength (input/output)	4000VAC, 50Hz/60Hz, 1min
Insulation resistance(input/output)	1000MΩ (500VDC)
Max. capacitance (input/output)	8pF
Shock resistance	Acceleration 980m/s ² , continuous surge 6ms
Vibration resistance	10 ~ 55Hz, 1.5mm, DA
Ambient humidity	45% ~ 85% RH
Operating temperature	-30 ~ 85°C
Storage temperature	-30 ~ 100°C
Unit weight	Approx. 20g

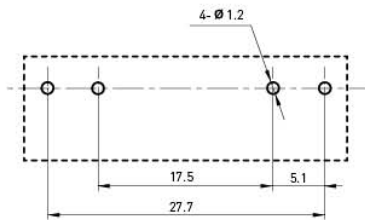
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT

Unit: mm

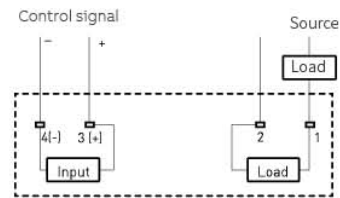
Outline Dimensions



PCB Layout (Bottom view)



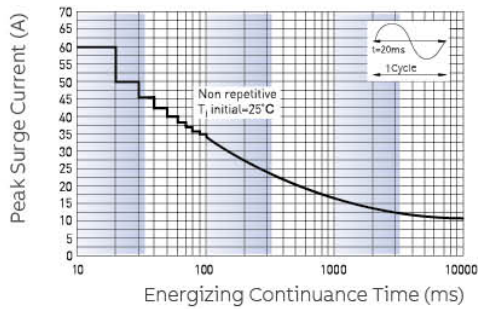
Wiring Diagram



CHARACTERISTIC CURVES

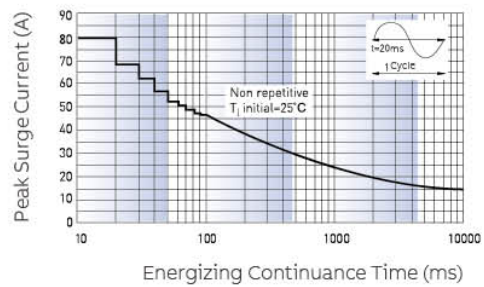
Max. Permissible Non-repetitive Peak Surge Current vs. Continuance Time

□ - □□ 2



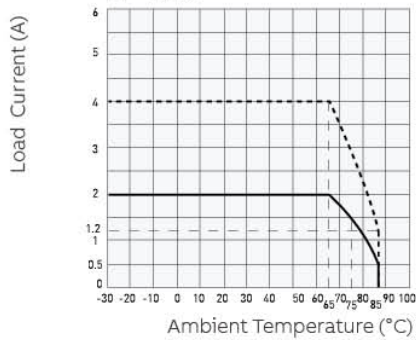
Max. Permissible Non-repetitive Peak Surge Current vs. Continuance Time

□ - □□ 3



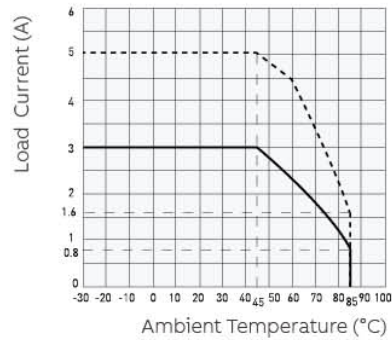
Max. Load Current vs. Ambient Temperature

□ - □□ 2



Max. Load Current vs. Ambient Temperature

□ - □□ 3



Frequency is 1Hz
to 30Hz and duty
is 50%

Duty is 100%.