



HANDOUK

SG RELAY



Features

- Input: DC control
- Double SCR AC output or TRIAC AC output
- 4000V dielectric strength
- Printed circuit board mount
- Environmental friendly product (RoHS compliant)

INPUT (TA = 25 °C)

Input voltage	D	3 to 32VDC
	1D	3 to 15VDC
	2D	15 to 32VDC
Must operate voltage	D	3VDC
	1D	3VDC
	2D	15VDC
Must release voltage	1.0VDC	
Max. Input current	D	25mA
	1D	40mA
	2D	20mA

OUTPUT (TA = 25°C)

Load voltage range		48 to 280VAC (240VAC rated voltage)
		48 to 440VAC (380VAC rated voltage)
		48 to 530VAC (480VAC rated voltage)
Load current range		0.1 to 5A
Max.surge current (10ms)		Triac output: 120Apk SCR output: 250Apk
Max.off-state leakage current		1.5mA
Max.on-state voltage drop		1.5Vrms
Max. turn-on time	Zero-cross	1/2 cycle + 1ms
	Random	1ms
Max. turn-off time		1/2 cycle + 1ms
Max. transient overvoltage		600Vpk (at 240VAC rated voltage)
Min. off-state dv/dt		800Vpk (at 380VAC rated voltage)
		1200Vpk (at 480VAC rated voltage)
		200V/μs
Min. power factor		0.5
Max. I ₂ t (10ms)		Triac output: 78A2 s

SCR output: 310A2 s

DESCRIPTION

SG 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 SG SSR range offers a choice of 240VAC, 380VAC, 480VAC versions. Input Voltage specifications have 3 to 15VDC, 15 to 32VDC and 3 to 32VDC.

PRECAUTIONS

- 1□ Soldering must be completed within 10 seconds at 260 or less or within 5 seconds at 350 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 SG series for an AC load with a peak voltage of more than the rated, connect the load terminals of the relay to an inrush absorber (varistor). For 220VAC the recommended varistor voltage is 470V; For 380VAC, the recommended varistor voltage is 750V.

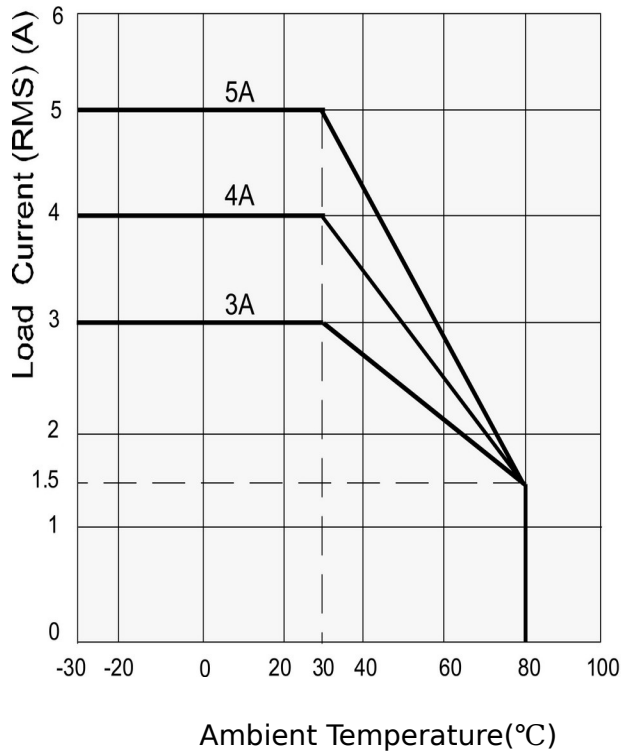
ORDERING INFORMATION

	SG	2	D-	240	A	5	Z	S	N	G	(XXX)
Type								-			
Input voltage	D:3 to 32VDC 1D:3 to 15V 2D:15 to 32V										
Input voltage form	D: DC										
Load voltage	240: 240V 380:380V 480:480V										
Load voltage form	A:AC										
Load current	3:3A 4:4A 5:5A										
Zero cross function	Z: Zero cross turn-on P: Random cross turn-on										
Output component	S: SCR Nil: TRIAC										
RC snubber	N: Without RC snubber Nil: With RC snubber										
Sead form	G: Epoxy resin dipped version Nil: plastic case version										
Customer special code											

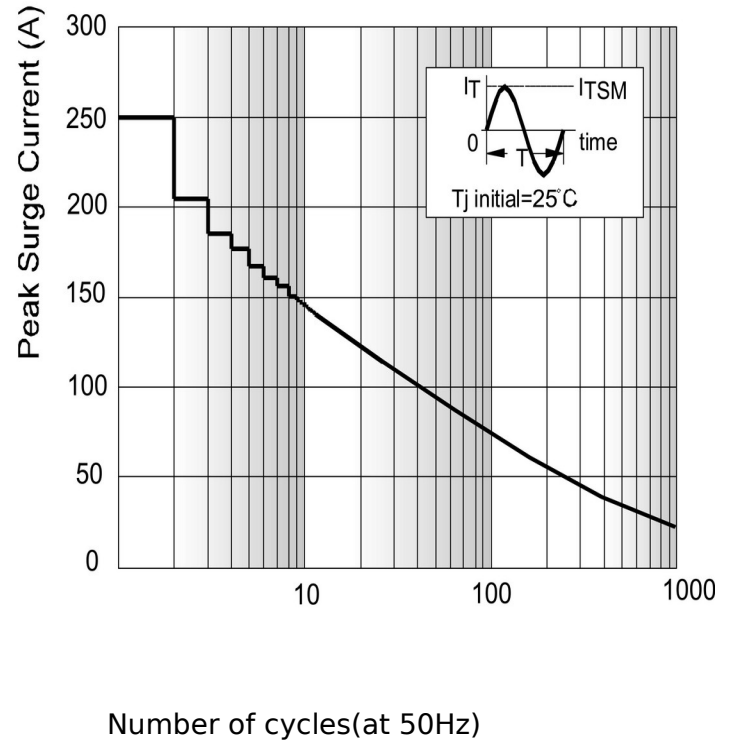
Notes: 1) If input voltage is D type(3-32VDC), the load voltage would be only available in 240V or 380V, and the output component is Triac only.

CHARACTERISTIC CURVES

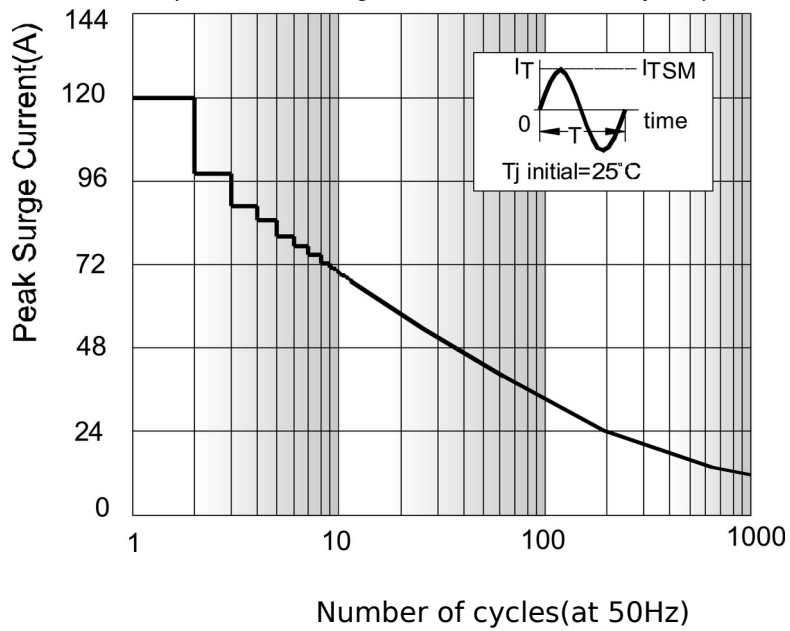
Max. Load Current vs. Ambient Temp.



Max. Permissible Non-repetitive Peak Surge Current vs. Number of Cycles(SCR AC switch output)



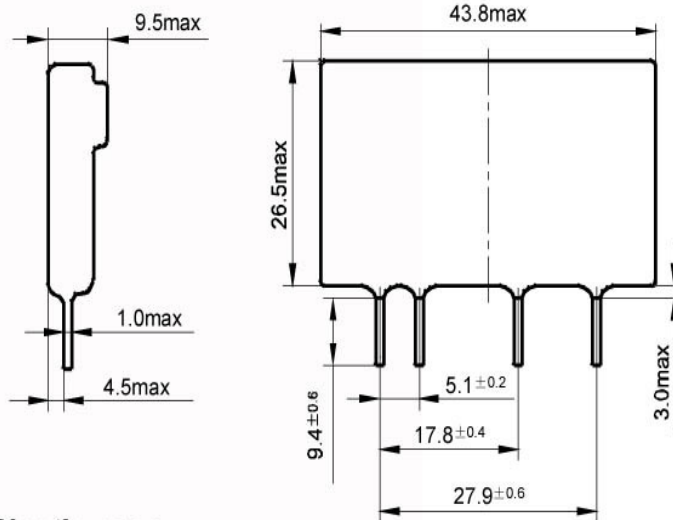
Max. Permissible Non-repetitive Peak Surge Current vs. Number of Cycles(TRIAC switch output)



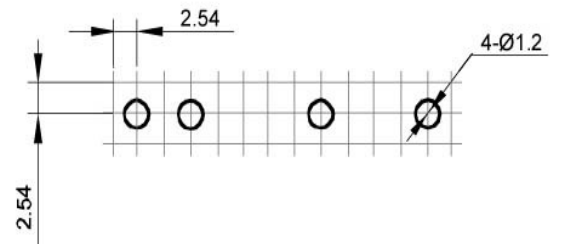
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT Unit mm

Outline Dimensions

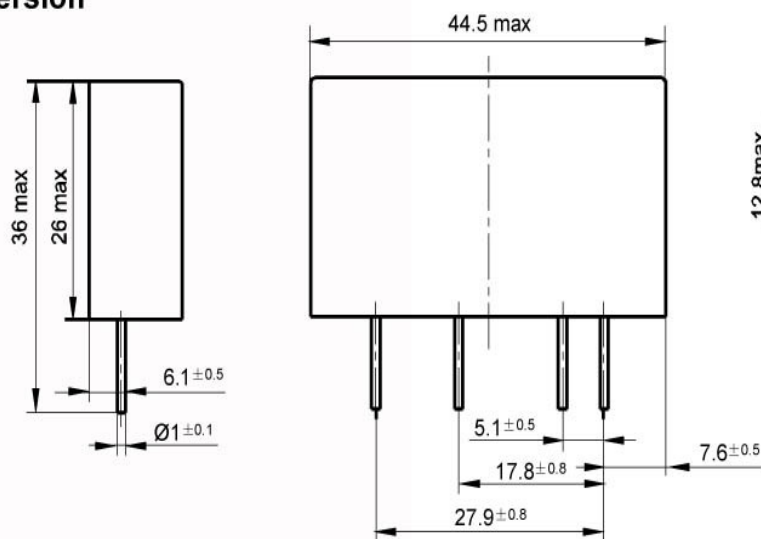
Epoxy resin dipped version



PCB Layout (Bottom view)



Plastic case version



OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LATOUT Unit mm

Wiring Diagram

