

Features:

- Low coil power consumption.
- Micro-miniature relay, standard PCB terminals.
- Compliant with IEC60335-1 & CTI250V
- UL60079-15 compliant product is available.

Typical applications:

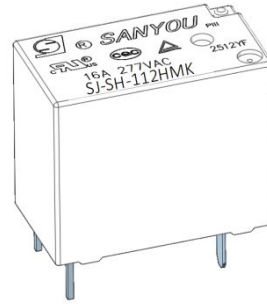
- Home appliances: air conditioner, heater, etc.
- Vending machine.
- Office equipment: computer, fax machine, etc.
- Electric controlled window, car antenna, door lock, etc.

Approvals

UL、c-UL (File No.): E190598

TUV (File No.): R50142420

CQC (File No.): CQC02001002114, CQC09002030583, CQC11002064518, CQC22002367720



Contact Data

Contact arrangement	1form A(NO)
Contact resistance	100m Ω Max.(at 1A 6VDC)
Rated voltage	277VAC
Max.switching voltage	277VAC
Rated current	16A
Min. recommended contact load	1A, 6VDC
Breaking capacity max.	4432VA
Contact material	AgSnO ₂ AgNi&AgSnO ₂
Frequency of operation	360 ops./h
Operate/release time max.	10ms/5ms
Electrical endurance	See electrical endurance graph

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
SJ	A(NO)	16A,277VAC,cos φ=1,105°C	1X10 ⁵
UL 60947-4-1			
SJ	A(NO)	16A,277VAC,cos φ=1,105°C	1X10 ⁵
GB/T 21711.1-2023			
SJ	A(NO)	16A,277VAC,105°C	2X10 ⁴
Mechanical endurance			≥5x10 ⁶

Coil Data

Coil voltage range:	5 to 24VDC
Operative range, IEC 61810	2
Coil insulation system according UL	Class F

Coil Data (continued)

Coil versions, DC coil

Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω (±10%)	Rated coil powers mW
5	≤3.75	≥0.25	47	530
6	≤4.5	≥0.3	68	530
9	≤6.75	≥0.45	153	530
12	≤9	≥0.6	272	530
18	≤13.5	≥0.9	611	530
24	≤18	≥1.2	1087	530

All figures are given for coil without pre-energization, at ambient temperature 20°C

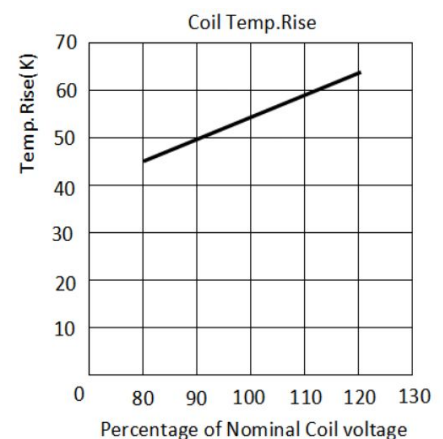
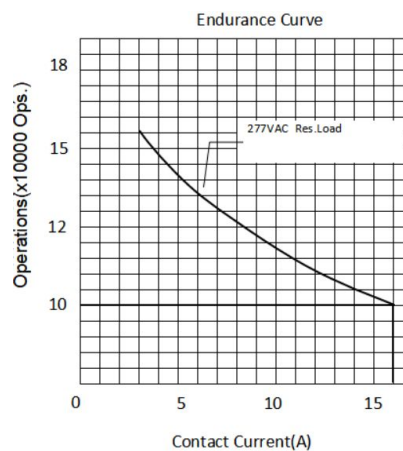
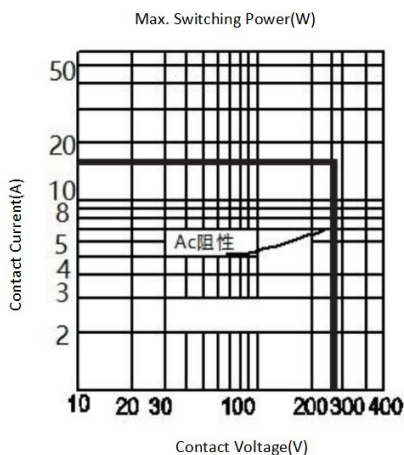
Insulation Data

Initial dielectric strength	
between open contacts	1000VAC
between contact and coil	4000VAC
Clearance/Creepage	
between contact and coil (Clearance)	≥8.0mm(actual)
between contact and coil (Creepage)	≥8.0mm(actual)
Material group of insulation parts	IIIa
Tracking index of relay	PTI 175V/PTI 250V

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH

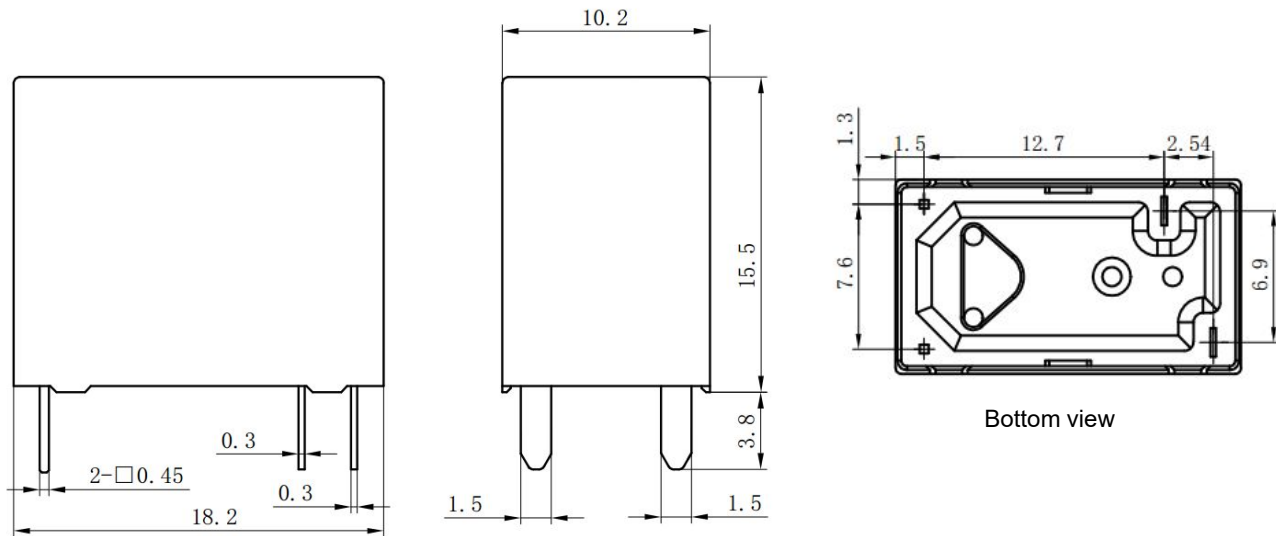
Ambient temperature	-40°C to +105°C
Category of environmental protection	
IEC 61810	RTII - flux proof
	RTIII - Sealed type washable
Weight	Approx. 5.9g
Resistance to soldering heat THT (IEC 60068-2-20)	260°C/5s
Packaging/unit	tube, tray



Note:

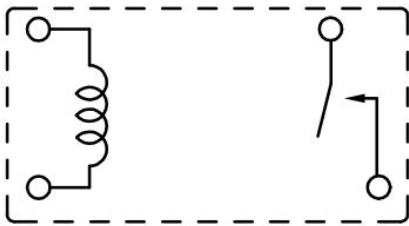
- (1) Test conditions: room temperature, flux-proof product, resistive load, 1s on, 9s off.
- (2) The above curves are for reference only, and the final result is subject to the experiment.

Dimensions

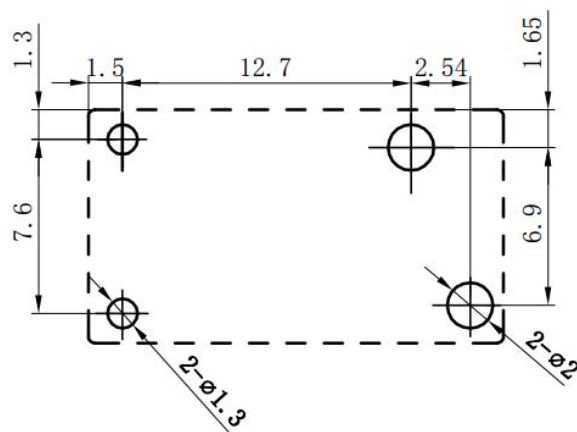


Bottom view

Wiring Diagrams



PCB Layouts (bottom view)



In case of no tolerance shown on outline dimension
 If dimension < 1 mm, tolerance: $\pm 0.2\text{mm}$
 If dimension 1~5mm, tolerance: $\pm 0.3\text{mm}$
 If dimension > 5mm, tolerance: $\pm 0.4\text{mm}$

Note:

- 1.The dimension of pin is the size before tinning
- 2.Tolerance of PCB layout: $\pm 0.1\text{ mm}$.

Product code structure

SJ	-S	-1	12	H	M	K	-F	-XX	Special Parameter: Nil-Standard, Letter or number-Special requirement
									Insulation System: Nil-Class F, F-Class F
									Contact Material: Nil-AgSnO ₂ , 3-AgNi&AgSnO ₂
									Contact capacity: K-16A
									Contact Arrangement: M-Form A
									Coil Power: H-0.53W
									Rated Coil voltage(VDC): 05,06,09,12,18,24
									Number of poles : 1-1Pole
									Protective Construction: S-Flux proofed, SH-Sealed type washable
									Type: SJ

- (1) Flux-proofed relays can not be used in the environment with pollutants like H₂S, SO₂, NO₂, dust, etc.
- (2) Water cleaning or surface process is not suggested after the flux-proofed relays are assembled on PCB.
- (3) Special requirements of customers (XX) shall be evaluated by our company and marked by characteristic symbols.
- (4) Ex suffix stands for product compliant with UL60079-15, which is only available for "SH-Sealed type washable" products.

Examples of ordering codes

SJ-S-112HMK relay SJ, Flux-proof, rated DC voltage 12V, coil power 0.53W, 1NO, and contact material AgSnO₂.

Disclaimer

The specification is for reference only. Specifications are subject to change without prior notice.

We could not evaluate all the performance and all the parameters for every possible applications. Thus the users should in a right position to choose suitable product for their own application. For sealed relays, after installation and cleaning, please open the ventilation hole in the case before use. If there is any query, please contact Sanyou for technical services. However it is the user's responsibility to determine which product should be used.