



12×12.9×9.9

# S4520

## Features

- Small size, light weight( 4g)
- Withstands high temperature, operating under 105 °C ambient temperature.
- Heavy contact load switching current up to 30A.

## Contact Data

Contact Arrangement	1A ( SPSTNO ) ,1C ( SPDT(B-M) )	
Contact Material	AgSnO <sub>2</sub> AgNi	
Contact Rating	Resistive : 1A:30A,20A/14VDC 1C:NO:30A,20A/14VDC; NC:25A,15A/14VDC	
Max. Switching Power	420W	
Max. Switching Voltage	24VDC	Max. Switching Current:30A
Max. carrying current	NO:40A for 2 minutes,30A for 1 hour(12VDC at 20 °C); 35A for 2 minutes,25A for 1hour(12VDC at 85 °C)	
Contact Resistance or Voltage drop	≤ 30mV (at 10A)	Item 4.12 of IEC 61810-7
Operation life	Electrical	10 <sup>5</sup> Item 4.30 of IEC 61810-7
	Mechanical	10 <sup>7</sup> Item 4.31 of IEC 61810-7

## Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance Ω ±10%	Pickup voltage VDC(max) (57% of rated voltage)	Release voltage VDC(min) (12.5% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
010-550	10	12	181	5.7	1.25	0.55	≤4	≤1.5
012-570	12	14.4	254	6.9	1.5	0.57		

## Operation condition

Insulation Resistance	1000M Ω min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength		
Between contacts	50Hz 500V	Item 6 of IEC 60255-5
Between contact and coil	50Hz 500V	Item 6 of IEC 60255-5
Shock resistance	300m/s <sup>2</sup> 6ms	IEC 68-2-27 Test Ea
Vibration resistance	10~500Hz double amplitude 1.27mm 60m/s <sup>2</sup>	IEC 68-2-6 Test Fc
Terminals strength	10N	IEC 68-2-21 Test Ual
Solderability	235 °C ±2°C 3±0.5s	IEC 68-2-20 Test Ta method 1
Ambient Temperature	-40~105 °C	
Relative Humidity	85% (at 20 °C)	IEC 68-2-3 Test Ca
Mass	4g (Q type 9.5g)	

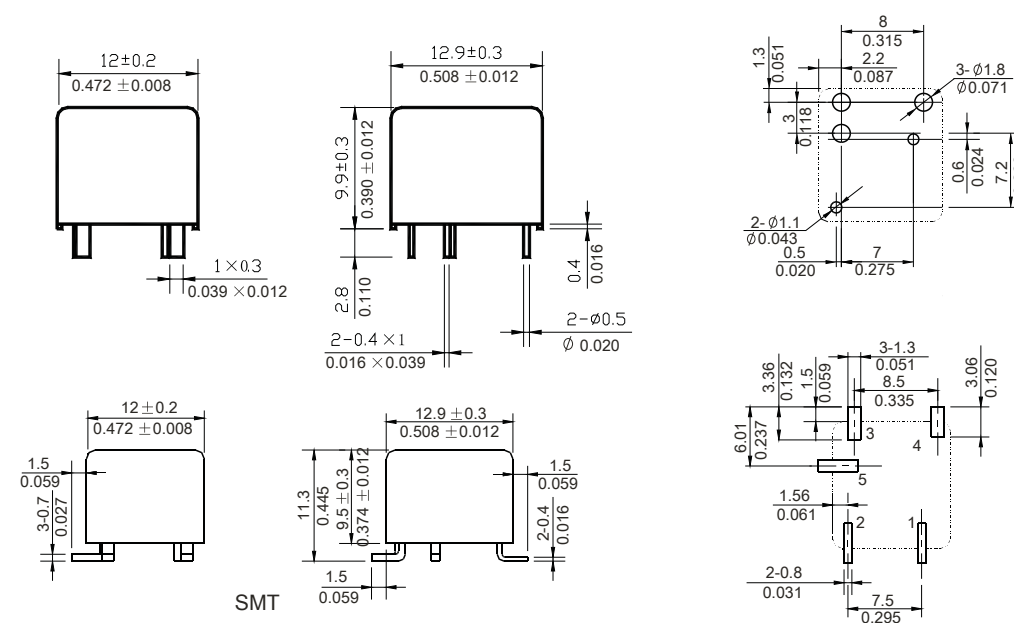
**CAUTION:** 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.  
2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

## Sound Pre. Characteristics (Q type) :

Operation noise : <50db  
Coil voltage :12VDC

## Dimensions

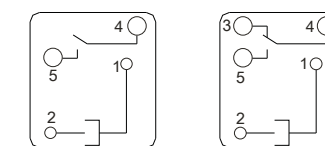
mm /inch



SMT

Dimensions

Mounting (Bottom view)



1A

1C

Wiring diagram  
(Bottom view)

NOTES 1).Dimensions are in millimeters.

2).Inch equivalents are given for general information only .