

## Main Feature

1. Slim type one make Relay with size 24.5 x 10.5 x 24.8 mm. Contact Capacity of 10A is available to comply with wide application.
2. Insulation distance 6mm is designed for Surge Resistance 7000V.
3. Double Insulation construction for high reliability.
4. The employment of suitable plastic material to be applied for high temperature and various chemical solutions.
5. Complete protective construction is designed from dust and solder flux. If required, the plastic sealed type is available for washing procedure.
6. TV-5 at 120VAC is certified by UL .

## Application

Industrial Control Units, Air Conditioners and Consumer Equipment use, etc.



## Contact Rating

- Nominal Load (Resistive Load  $\cos \varphi = 1$ )  
Contact Capacity ..... 10A at 120VAC.  
10A at 30VDC.  
TV-5 at 120VAC.  
5A at 250VAC.  
5A at 30VDC
- Rated Carrying Current ..... 10A.
- Max. Allowable Current ..... 10A.
- Max. Allowable Voltage ..... AC 250V, DC 110V.
- Max. Allowable Power Force 1800 VA, 210W.
- Min. Switching Load ..... DC 10V, 10mA.
- Contact Material ..... Ag Alloy.
- Contact Form ..... SPST.

## Performance (at Initial Value)

- Contact Resistance ..... 100m $\Omega$  Max. @1A, 6VDC
- Operate Time ..... 15 mSec. Max.
- Release Time ..... 8 mSec. Max.
- Dielectric Strength :  
Between Coil & Contact ..... 4,000VAC at 50/60 Hz  
for one minute.  
Between Contacts ..... 900VAC at 50/60 Hz  
for one minute.
- Surge Resistance ..... 7,000 V (between Coil & Contact 1.2x50 $\mu$ Sec.)
- Insulation Resistance ..... 100 Mega $\Omega$  Min. at 500VDC.
- Max. On/Off Switching :  
Electrical ..... 30 Ops. per Minute.  
Mechanical ..... 300 Ops. per Minute.

- Temperature Range ..... -30~55°C
- Humidity Range ..... 45~85% RH.
- Coil Temperature Rise ..... 40°C Max.
- Vibration :  
Endurance ..... 10 to 55 Hz dual  
amplitude width 1.5mm.  
Error Operation ..... 10 to 55 Hz dual  
amplitude width 1.5mm.
- Shock :  
Endurance ..... 1,000 m/S<sup>2</sup> Min.  
Error Operation ..... 100 m/S<sup>2</sup> Min.
- Life Expectancy :  
Mechanical ..... 10<sup>7</sup> Operations at No  
Load condition.  
Electrical ..... 10<sup>5</sup> Operations at Rated  
Resistive Load.  
2.5x10<sup>4</sup> Operations at  
TV Rated Load.
- Weight ..... About 10.2 g.

## Safety Standard & Its File Number

SMIT - DM/LM

- UL ..... E141060
- CSA ..... LR76598(DM only)
- TÜV ..... R9854437

SMIT - DMR/LMR

- SMKO ..... 00041132101
- C-UL ..... E141060
- TÜV ..... R9854437
- CSA ..... LR76598(DMR only)

## Coil Specification (at 20°C)

Coil Sensitivity	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega \pm 10\%$ )	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Maximum Allowable Voltage (VDC)
SMIT-DM/R	3	176.5	17	Abt. 0.54	80% Maximum	5% Minimum	120%
	5	106.4	47				
	6	88	68				
	9	58	155				
	12	44.4	270				
	24	21.8	1,100				
SMIT-LMR	3	83	36	Abt. 0.25	80% Maximum	5% Minimum	120%
	5	50	100				
	6	42	144				
	9	28	325				
	12	21	580				
	24	10.4	2300				

## Ordering Information

SMIT - SS - 1 12 D M R

**Contact Rating:** Nil: 10A/120VAC  
R: 5A/250VAC

**Contact Form:** M: One Form A

**Coil Type:** D: Standard DC Coil  
L: High Sensitivity DC Coil

**Coil Voltage:** 03: 3V, 05: 5V, 06: 6V, 09: 9V, 12: 12V, 24: 24V, 48: 48V

**Number of Pole:** 1: One Pole

**Type of Sealing:** SS: Flow Solder Type  
SH: Plastic Sealed Type

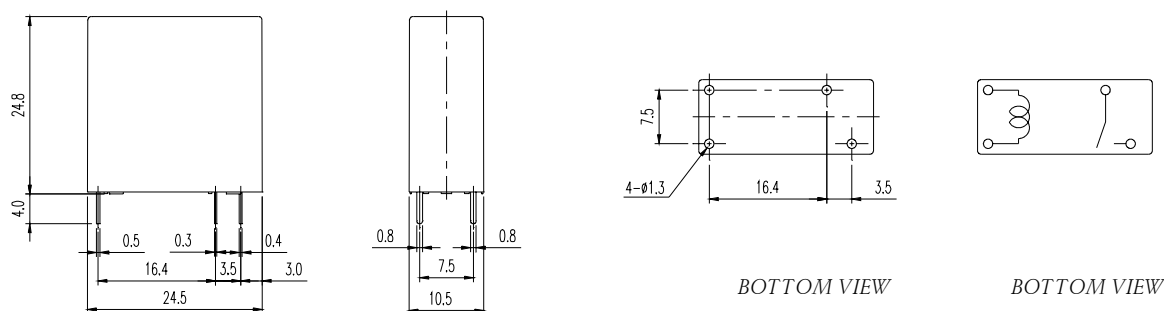
**Type:** SMIT

## Classification

Model	SMIT			
	Standard DC Coil		High Sensitivity DC Coil	
Coil Sensitivity				
Contact Rating	10A / 120 VAC	5A / 250 VAC	10A / 120 VAC	5A / 250 VAC
Flow Solder Type	SMIT -SS-1□□DM	SMIT -SS-2□□DMR	SMIT -SS-1□□LM	SMIT -SS-2□□LMR
Plastic Sealed Type	SMIT -SH-1□□DM	SMIT -SH-2□□DMR	SMIT -SH-1□□LM	SMIT -SH-2□□LMR

## Dimension

SMIT-SS/SH



## Reference Data

