



## Main Feature

1. 10A slim type relay for various applications.
2. 6mm insulation distance with Surge Strength 7,000V.
3. Double Insulation construction for high reliability.
4. UL Class F insulation available.
5. TV-5 120VAC certified.
6. Halogen Free series available.
7. Comply with RoHS and REACH regulations



## Contact Rating

Load Type	SMIT (DMR/LMR)
Rated Load (Resistive)	10A 250 VAC
	10A 30VDC
Contact Capacity	TV-5 120VAC
Rated Carrying Current	10A
Max. Allowable Voltage	AC 250V
	DC 110V
Max. Allowable Current	10A
Max. Allowable Power Force	1250VA
	300W
Contact Material	Ag Alloy
Contact Form	SPST

## Application

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

## Performance (at Initial Value)

- Contact Resistance ..... 100mΩ Max. @1A,6VDC
- Operate Time..... 15 mSec. Max.
- Release Time ..... 10 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 Strength..... 7,000 V (between Coil & Contact 1.2x50μSec.)
- Insulation Resistance ..... 100 MegaΩ Min. at 500VDC
- Max. On/Off Switching:
  - Electrical ..... 20 Cycles per Minute
  - Mechanical ..... 300 Cycles per Minute
- Temperature Range..... -40~+70°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>
  - Error Operation .....100 m/S<sup>2</sup>
- Life Expectancy:
  - Mechanical .....10<sup>7</sup> Operations at No Load condition
  - Electrical .....10<sup>5</sup> Operations at Rated Resistive Load
  - TV Rated Load
- Weight.....About 10.2 g

## Safety Standard & File Number

- UL & C-UL.....E141060
- TÜV.....R09854437
- CQC.....09002037101

## 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-DMR	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	2,300				

## Ordering Information

SMIT - SS - 1 12 D M R F

Insulation System:

Nil: Standard Class  
F: Class F

Contact Rating:

R: 10A/250VAC

Contact Form:

M: One Form A

Coil Type:

D: Standard DC Coil

L: High 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: RT II Flux Proofed

SH: RT III Wash Tight

Type:

SMIT

## Classification

Model	SMIT	
Coil Sensitivity	Standard DC Coil	High DC Coil
Contact Form	DMR	LMR
Flux Proofed	SMIT-SS-1□□DMR	SMIT-SS-1□□LMR
Wash Tight	SMIT-SH-1□□DMR	SMIT-SH-1□□LMR

Dimension ( $\leq 5\text{mm} \pm 0.2\text{mm}$ ,  $> 5\text{mm} \pm 0.3\text{mm}$ , the tolerance of PCB thru hole:  $+0.1\text{mm}$ )

