



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 6 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:
 - Destruction 10 to 55 to 10 Hz,0.75 mm single amplitude (1.5mm double amplitude)
 - Malfunction 10 to 55 to 10 Hz,0.75 mm single amplitude (1.5mm double amplitude)
- Shock:
 - Destruction 1,000 m/S²
 - Malfunction 100 m/S²
- Life Expectancy:
 - Mechanical 10⁷ Operations at no Load condition
 - Electrical 10⁵ Operations at Rated Resistive Load
2.5x10⁴ Operations at 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

| | |
|--|---|
| <p>SMIT - SS - 1 12 D M R F</p> | <p>Insulation System: Nil: Standard Class F: Class F</p> <p>Contact Rating: R: 10A/250VAC</p> <p>Contact Form: M: One Form A</p> <p>Coil Type: D: Standard DC L: High DC</p> <p>Coil Voltage: 03: 3V, 05: 5V, 06: 6V, 09: 9V, 12: 12V, 24: 24V, 48: 48V</p> <p>Number of Pole: 1: One Pole</p> <p>Type of Sealing: SS: RT II Flux Proofed SH: RT III Wash Tight</p> <p>Type: SMIT</p> |
|--|---|

CLASSIFICATION

| Model | SMIT | |
|------------------|--|--|
| Coil Sensitivity | Standard DC | High DC |
| Contact Form | DMR | LMR |
| Flux Proofed | SMIT -SS-1 <input type="checkbox"/> <input type="checkbox"/> DMR | SMIT -SS-1 <input type="checkbox"/> <input type="checkbox"/> LMR |
| Wash Tight | SMIT -SH-1 <input type="checkbox"/> <input type="checkbox"/> DMR | SMIT -SH-1 <input type="checkbox"/> <input type="checkbox"/> 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: $+0.1\text{mm}$)

