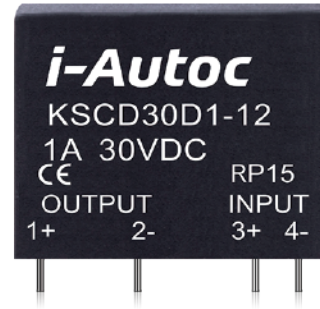


Product Description

- ◆ MOSFET Output (4A) or Transistor Output (1A)
- ◆ Control Voltage: 5VDC, 12VDC, 24VDC
- ◆ Load Current: 1A, 4A
- ◆ Dielectric Strength: 2500Vrms
- ◆ PCB Mounted
- ◆ RoHS Compliant



Ordering Information

| | | | | | | |
|----------------------------|--|------------|---|--|--|-----------------|
| KSCD | 30 | D | 1 | -12 | T | (XXX) |
| KSCD Series ⁽¹⁾ | Load Voltage 30: 3-30VDC 60: 0-35VDC | DC Control | Load Current ⁽²⁾ 1: 1Amp 4: 4Amp | Control Voltage 5: 5VDC 12: 12VDC 24: 24VDC | Blank: Standard T Pin Layout: T Type Footprint | Customized Code |

(1): Note: Part numbers available are listed in the table below.
 (2): MOSFET Output (4A) or Transistor Output (1A)

| Control Voltage | 1A | 4A |
|-----------------|----------------|----------------|
| 5VDC | KSCD30D1-5(T) | KSCD60D4-5(T) |
| 12VDC | KSCD30D1-12(T) | KSCD60D4-12(T) |
| 24VDC | KSCD30D1-24(T) | KSCD60D4-24(T) |

General Specifications

| Input Specifications (Ta=25°C) | | |
|--|-------|-----------------|
| Control Voltage Range | 5 | 4-6VDC |
| | 12 | 9.6-14.4VDC |
| | 24 | 19.2-28.8VDC |
| Must Turn-on Voltage | 5 | 4VDC |
| | 12 | 9.6VDC |
| | 24 | 19.2VDC |
| Must Turn-off Voltage | 1VDC | |
| Maximum Input Current | 5 | 25mA (@6VDC) |
| | 12 | 25mA (@14.4VDC) |
| | 24 | 25mA (@28.8VDC) |
| Output Specifications (Ta=25°C) | | |
| Load Voltage Range | 30VDC | 3-30VDC |
| | 60VDC | 0-35VDC |
| Maximum Transient Overvoltage | 30VDC | 30Vpk |
| | 60VDC | 70Vpk |
| Load Current Range | 1A | 0.02~1A |
| | 4A | 0.02~4A |
| Maximum Surge Current (@10 ms) | 1A | 4Apk |
| | 4A | 20Apk |
| Maximum On-State Voltage rop@Rated Current | 30VDC | 1.5V |
| | 60VDC | 0.5V |

General Specifications

Output Specifications (Ta=25°C)

| | |
|--|-------|
| Maximum Turn-on Time | 1ms |
| Maximum Turn-off Time | 1ms |
| Maximum Off-State Leakage Current@Rated Load Voltage | 0.1mA |

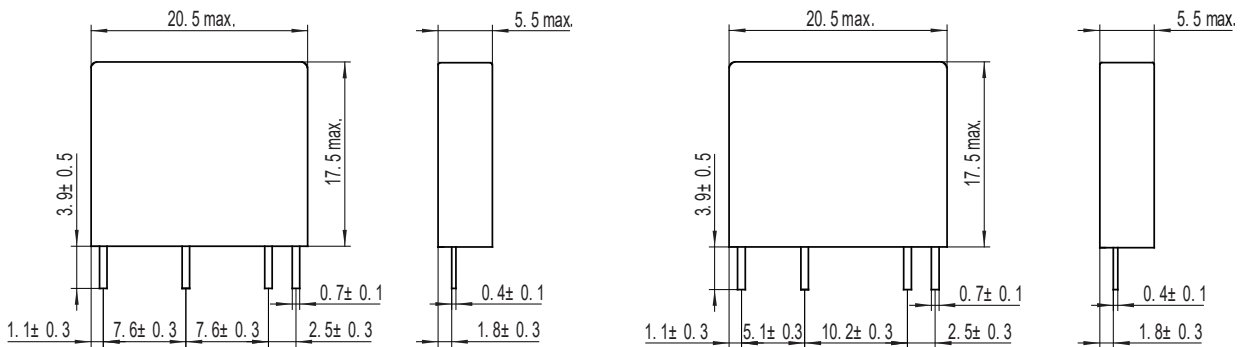
General Specifications (Ta=25°C)

| | |
|---|----------------|
| Dielectric Strength (50/60Hz) | 2500Vrms |
| Minimum Insulation Resistance (@500VDC) | 1000MΩ |
| Ambient Temperature Range | -30°C ~ +80°C |
| Storage Temperature Range | -30°C ~ +100°C |
| Weight (Typical) | 3g |

Applications

Suitable for DC motors, DC power supplies, electro-mechanical devices, and etc.

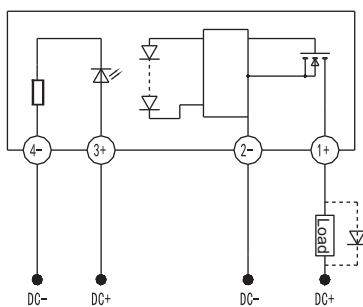
Outline Dimensions



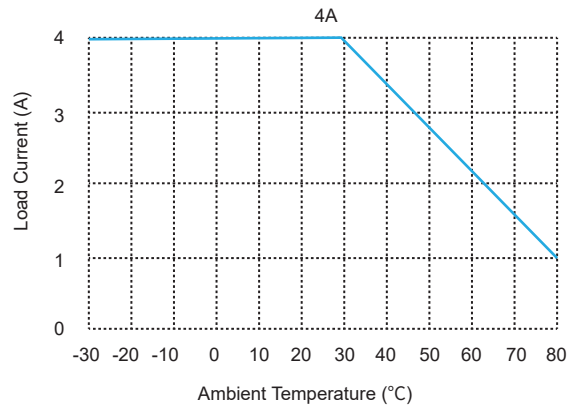
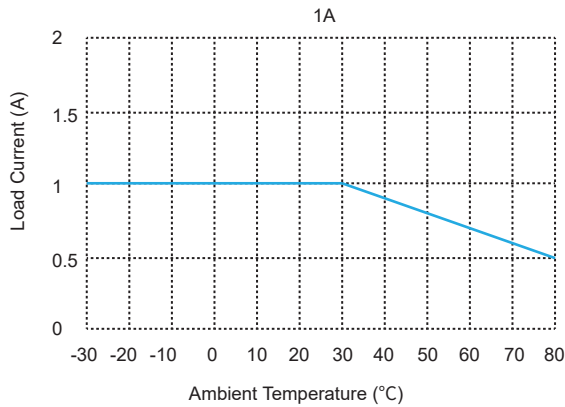
Standard Footprint

T Type Footprint

Wiring Diagram



Thermal Derating Curve



General Notes

1. Soldering must be finished within 10 seconds at 260°C, or finished within 5 seconds at 350°C. Otherwise it may cause damage to the relay.
2. Terminal polarity must be observed. Otherwise it may cause damage to the relay.
3. When ambient temperature is above 25°C, the maximum load current decreases. See thermal derating curve.
4. Capacitive load will produce very high surge current at the moment of conduction, which may lead to the damage of solid state relay due to the excessive surge current. Therefore, if the actual load is capacitive, or the load has paralleled large capacitance, it is strongly recommended that NTC should be connected in series in the load loop to suppress surge current in order to avoid damage to the product.

! Warnings

1. The product's side panels may be hot, allow the product to cool before touching.
2. Disconnect all power before installing or working with this equipment.
3. Verify all connections and replace all covers before turning on power.