

Product Description

- ◆ MOSFET Output
- ◆ Load Voltage: 48VDC, 100VDC
- ◆ Load Current: 5A
- ◆ Dielectric Strength: 2500Vrms
- ◆ RoHS Compliant



Ordering Information

<b>KSF</b>	<b>48</b>	<b>D</b>	<b>5</b>	<b>-12</b>	<b>(XXX)</b>
KSF Series <sup>(1)</sup>	Load Voltage 48: 0-48VDC 100: 0-75VDC	DC Control	Load Current 5: 5Amp	Control Voltage 5: 4-6VDC 12: 9.6-14.4VDC 24: 19.2-28.8VDC W: 4-32VDC	Customized Code

(1) Part numbers available are listed in the table below.

5VDC	KSF48D5-5	KSF100D5-5
12VDC	KSF48D5-12	KSF100D5-12
24VDC	KSF48D5-24	KSF100D5-24
W	KSF48D5-W	KSF100D5-W

General Specifications

Input Specifications (Ta=25°C)		
Control Voltage Range	5	4-6VDC
	12	9.6-14.4VDC
	24	19.2-28.8VDC
	W	4-32VDC
Must Turn-on Voltage	5/W	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)
	W	25mA (@32VDC)

Output Specifications (Ta=25°C)		
Load Voltage Range	48VDC	0-48VDC
	100VDC	0-75VDC
Maximum Transient Overvoltage	48VDC	48Vpk
	100VDC	150Vpk
Load Current Range	0.02-5A	
Maximum Surge Current (@10ms)	50A	
Maximum On-State Resistance	48VDC	37mΩ
	100VDC	100mΩ
Internal TVS Protection	48VDC	64.6-71.4VDC
	100VDC	105-116VDC

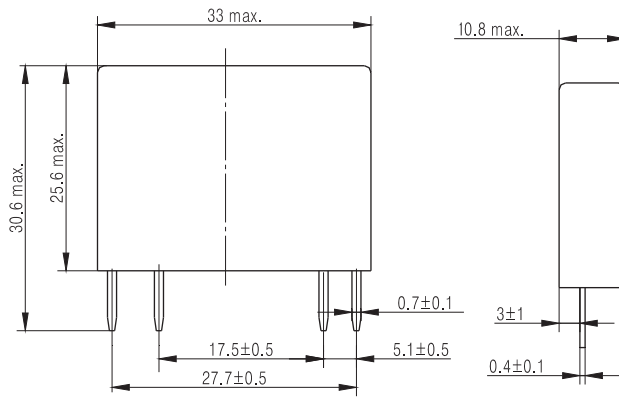
Output Specifications (Ta=25°C)	
Maximum Turn-on Time	1ms
Maximum Turn-off Time	1ms
Maximum Off-State Leakage Current@Rated Load Voltage	0.1mA

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)	20g

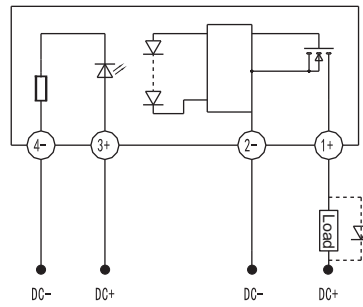
**Applications**

Suitable for DC motor, electromagnetic valve, electromagnet control, and etc.

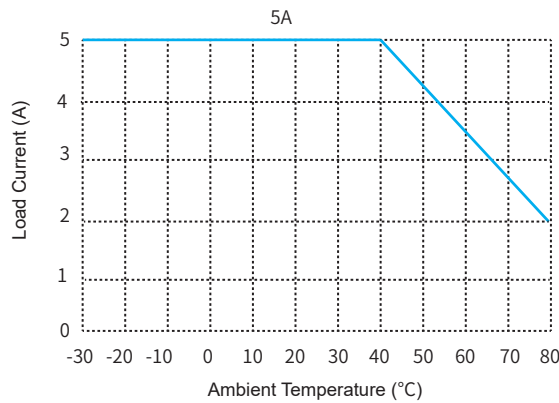
**Outline Dimensions**



**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.