

- ◆ MOSFET or IGBT Output
- ◆ Low Impedance
- ◆ 4-32VDC Control Input
- ◆ Load Current:7A-100A
- ◆ Dielectric Strength: 2500Vrms
- ◆ Internal Over-voltage Protection
- ◆ LED Indicator
- ◆ RoHS Compliant



Ordering Information

| KSJ | 50 | D | 40 | -L | (XXX) |
|----------------|--|------------|--|---------------|-----------------|
| KSJ Series (1) | Load Voltage 30: 30VDC 50: 50VDC 60: 60VDC 100: 100VDC 200: 200VDC 400: 400VDC 600: 600VDC 1200: 1200VDC | DC Control | Load Current 7: 7Amp 10: 10Amp 20: 20Amp 25: 25Amp 40: 40Amp 50: 50Amp 80: 80Amp 100: 100Amp | LED Indicator | Customized Code |

Note (1): The part number selection is subject to the following list.

| | 30VDC | 50VDC | 60VDC | 100VDC | 200VDC | 400VDC | 600VDC | 1200VDC |
|------|-------------|------------|------------|-------------|-------------|-------------|-------------|--------------|
| 7A | | | KSJ60D7-L | | | | | |
| 10A | | | | | KSJ200D10-L | | | |
| 20A | | | | KSJ100D20-L | KSJ200D20-L | | | |
| 25A | | | | | | KSJ400D25-L | KSJ600D25-L | KSJ1200D25-L |
| 40A | | KSJ50D40-L | | KSJ100D40-L | KSJ200D40-L | | | |
| 50A | KSJ30D50-L | | KSJ60D50-L | | | | KSJ600D50-L | KSJ1200D50-L |
| 80A | | KSJ50D80-L | | KSJ100D80-L | | | | |
| 100A | KSJ30D100-L | | | | | | | |

Input Specifications (Ta=25°C)

| | |
|-------------------------|-------------|
| Control Voltage Range | 4-32VDC |
| Must Turn-On Voltage | 4VDC |
| Must Turn-Off Voltage | 1VDC |
| Maximum Input Current | 25mA @32VDC |
| Maximum Reverse Voltage | 32VDC |

General Specifications

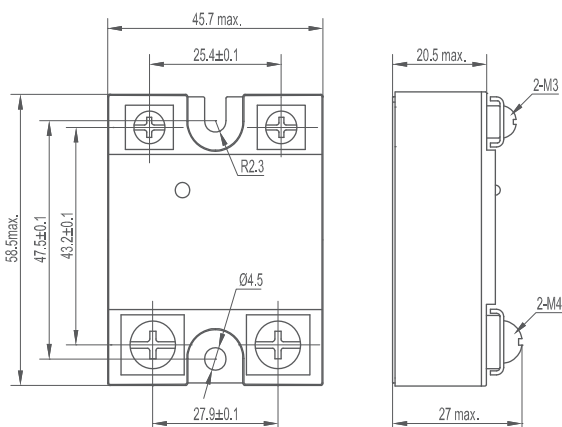
| Output Specifications (Ta=25°C) | | | | | | | | | | | | | | | | | | |
|---|-----------|-----|-----------|-----|-----------|-----|------------|-----|-----|-----|------------|----|-------------|------------|-------|-------------|-------|-----|
| | KSJ30D□-L | | KSJ50D□-L | | KSJ60D□-L | | KSJ100D□-L | | | | KSJ200D□-L | | KSJ400D25-L | KSJ600D□-L | | KSJ1200D□-L | | |
| | 50 | 100 | 40 | 80 | 7 | 50 | 20 | 40 | 80 | 100 | 10 | 20 | 40 | | 25 | 50 | 25 | 50 |
| Load Voltage Range (VDC) | 0-24 | | 0-36 | | 0-48 | | 0-75 | | | | 0-120 | | | 0-300 | 0-500 | | 0-650 | |
| Maximum Load Current (A) | 50 | 100 | 40 | 80 | 7 | 50 | 20 | 40 | 80 | 100 | 10 | 20 | 40 | 25 | 25 | 50 | 25 | 50 |
| Maximum Surge Current (A _{pk} @10ms) | 150 | 250 | 120 | 200 | 30 | 150 | 60 | 120 | 200 | 250 | 30 | 60 | 120 | 150 | 150 | 300 | 150 | 300 |
| Maximum On-State Resistance (mΩ) | 4.2 | 2.1 | 12 | 6 | 14 | 7 | 13 | 13 | 6.5 | 6.5 | 60 | 30 | 30 | | | | | |
| Maximum On-State Voltage Drop@Rated Current (V) | | | | | | | 1.75 | | | | | | | | | | | |
| Maximum Off-State Leakage Current@Rated Load Voltage (mA) | | | | | | | 0.1 | | | | | | | 0.5 | | | | |
| Minimum Load Current (mA) | | | | | | | 2 | | | | | | | 2 | | | | |
| Maximum Turn-On Time (ms) | | | | | | | 0.1 | | | | | | | 1 | | | | |
| Maximum Turn-Off Time (ms) | | | | | | | 0.1 | | | | | | | 1 | | | | |

| General Specifications (Ta=25°C) | | |
|---|--------------------|----------|
| Dielectric Strength (50/60Hz) | Input/Output | 2500Vrms |
| | Input, output/Base | 2500Vrms |
| Minimum Insulation Resistance (@500VDC) | 1000MΩ | |
| Ambient Temperature Range | -30°C ~ +80°C | |
| Storage Temperature Range | -30°C ~ +100°C | |
| Weight (Typical) | 100g | |

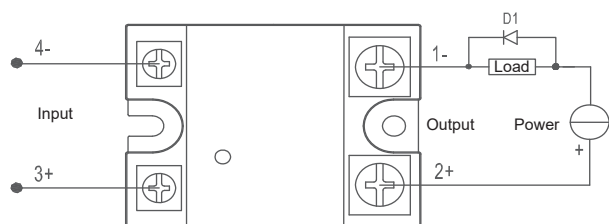
Applications

Control heating, DC power supplies, electromechanical valves, motors, medical equipment, and etc.

Outline Dimensions/Wiring Diagram



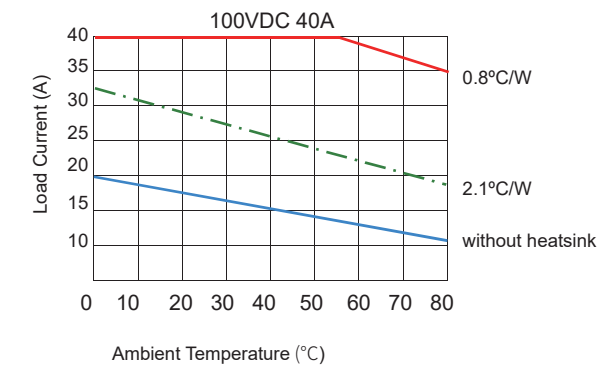
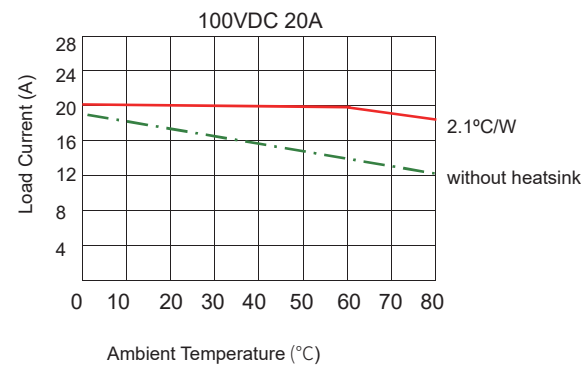
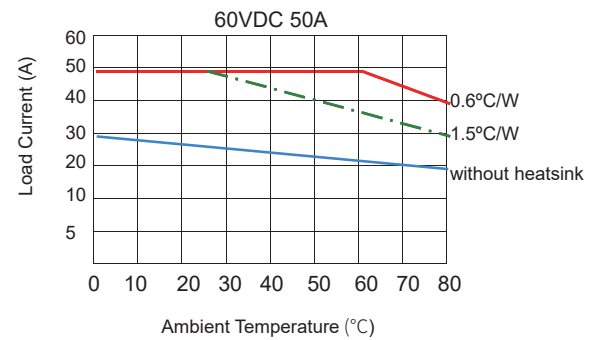
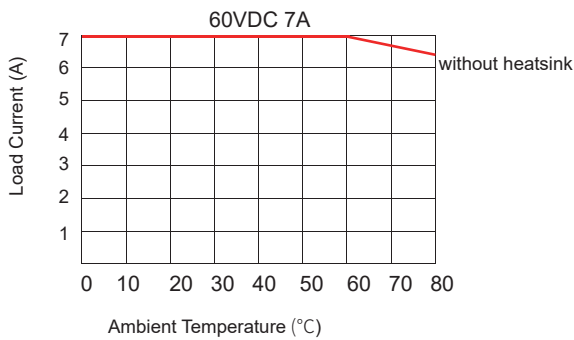
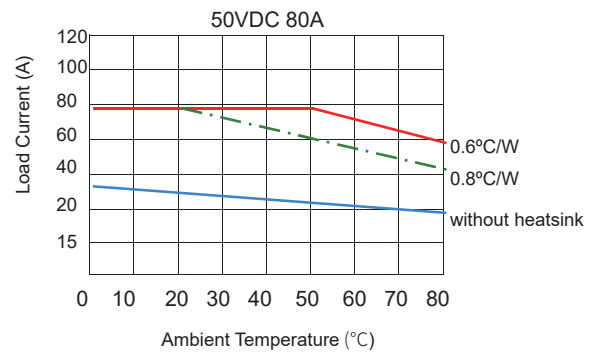
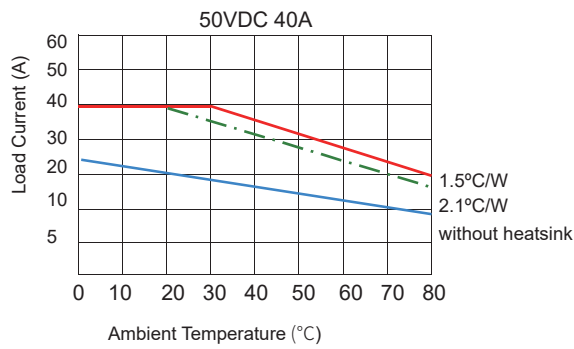
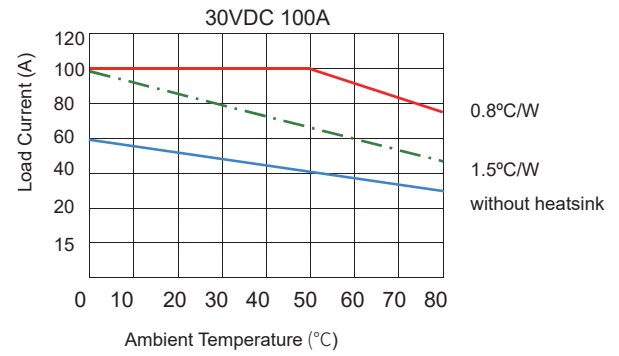
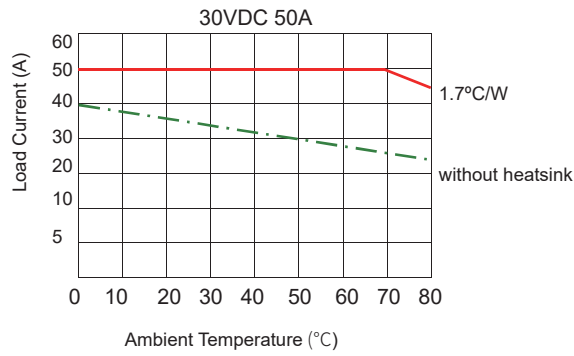
Outline Dimensions



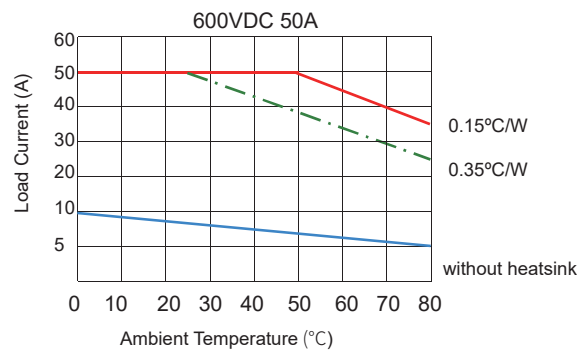
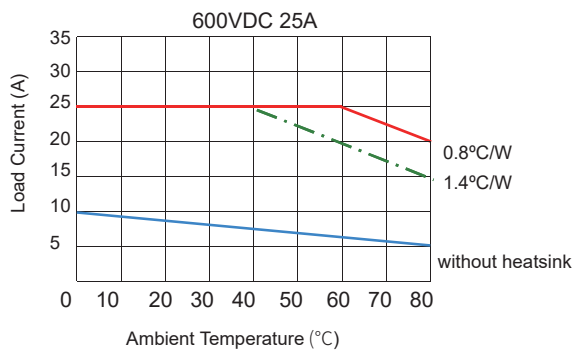
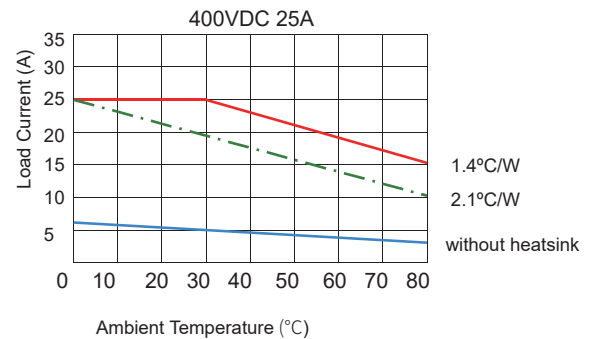
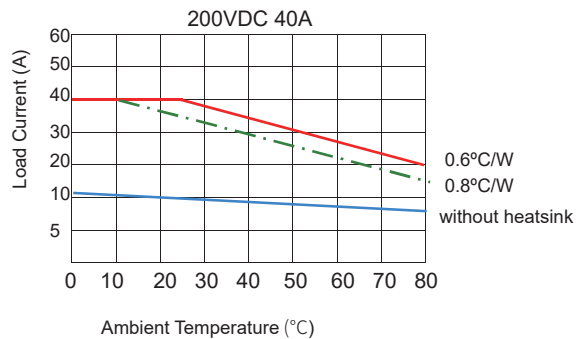
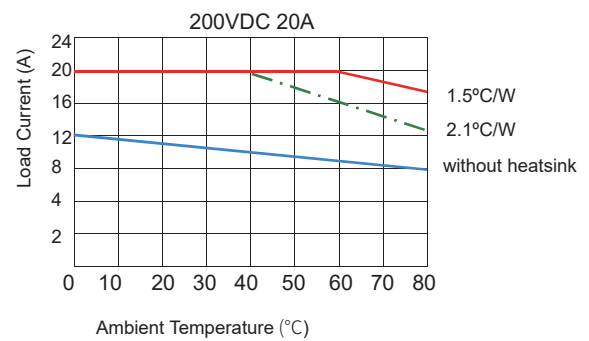
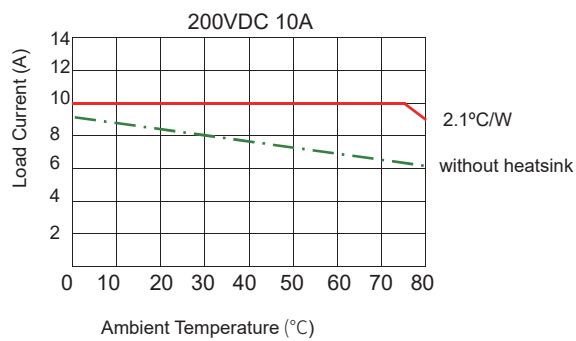
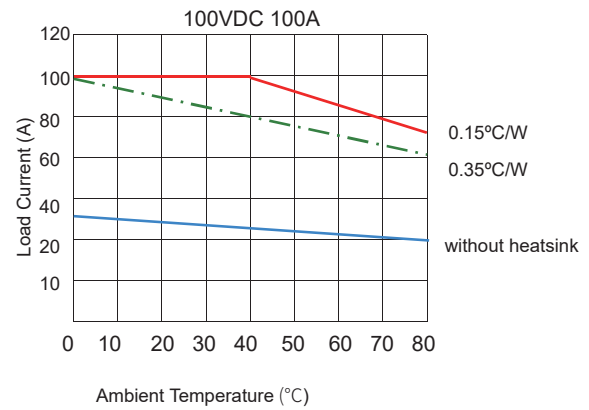
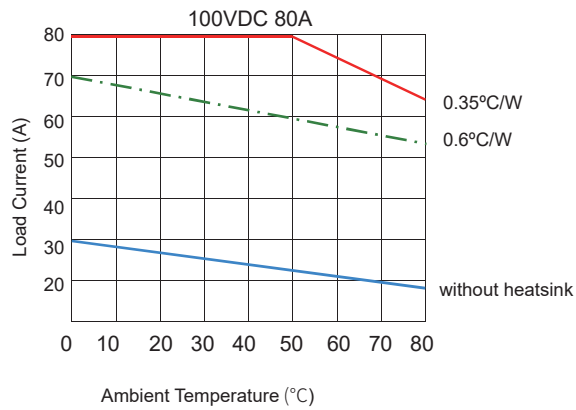
When the relay is used for inductive load control, please be sure to use a suppression circuit, just like the drawing above. Both load terminals are inverse paralleled with a fly-wheel diode D1.
D1: Fast Recovery Diode

Wiring Diagram

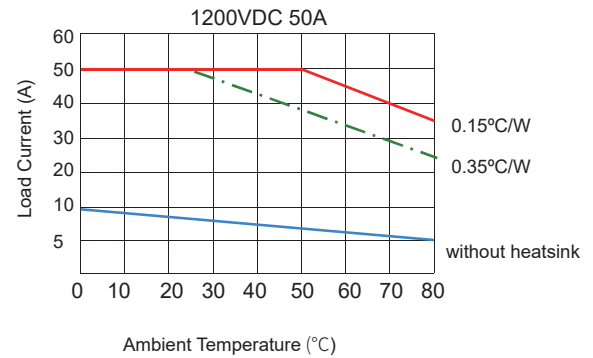
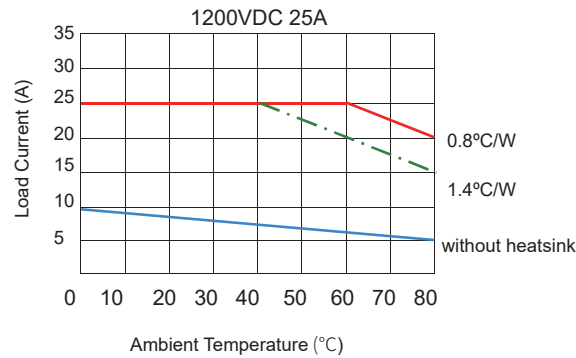
Thermal Derating Curve



Thermal Derating Curve



Thermal Derating Curve



General Notes




1. Relay must be mounted to proper sized heat sink based on thermal curves. Thermal grease or a thermal pad must be used between relay and heat sink and be torqued down to 18-20/2.0-2.2 in-lb/N·m.
2. When connection wiring to SSR please ensure screws are torqued down properly (input 13-15/1.5-1.7in/lb/N·m, output 18-20/2.0-2.2 in-lb/N·m).
3. When Ambient temperature is above 25 °C see thermal derating curve.

Agency Approvals (Certification)



Trademark Change Notification

Due to the company's strategic development needs, Xiamen Kudom Electronics Technology Co., Ltd will be acquired by i-Autoc (Xiamen) Investment Co., Ltd from 1st of July 2019. After the acquisition, all the products by Xiamen Kudom Electronics Technology Co., will no longer use Kudom trademark, but use i-Autoc trademark. The details of the change are as follows.

The original trademark  will be changed to . The original trademark  will still be used until 30th June 2019.

This is a change to the trademark only, the Company Name, Manufacturing Location, Management Team, Product Part Numbers and Safety Approval Licence Numbers (cUL, TUV, CCC, S-mark Etc) are to remain the same.