

# Solid State Relay

## KSJ30 Series Single Phase DC Output

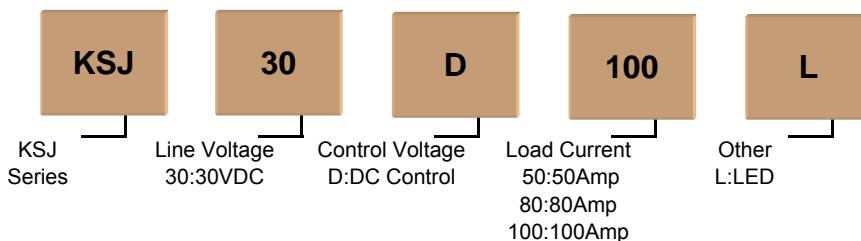


- MOSFET output
- Rating 50A,80A,100A@30VDC
- Low on impedance
- 4-32VDC control input
- Dielectric strength ≥4000Vrms
- Opto-isolation
- LED indication
- RoHS compliant

### Product Description

KSJ50 series is single-phase DC output printed board mounted solid state relay. Control voltage is 4-32VDC, load voltage is 0-30VDC, output current is 50A,80A,100A. Photoelectric isolation between input and output, dielectric strength ≥4000VACrms.

### Product Selection



Description	50A	80A	100A
D:4-32VDC	KSJ30D50	KSJ30D80	KSJ30D100
	KSJ30D50-L	KSJ30D80-L	KSJ30D100-L

### Technical Specification

#### Input Circuit

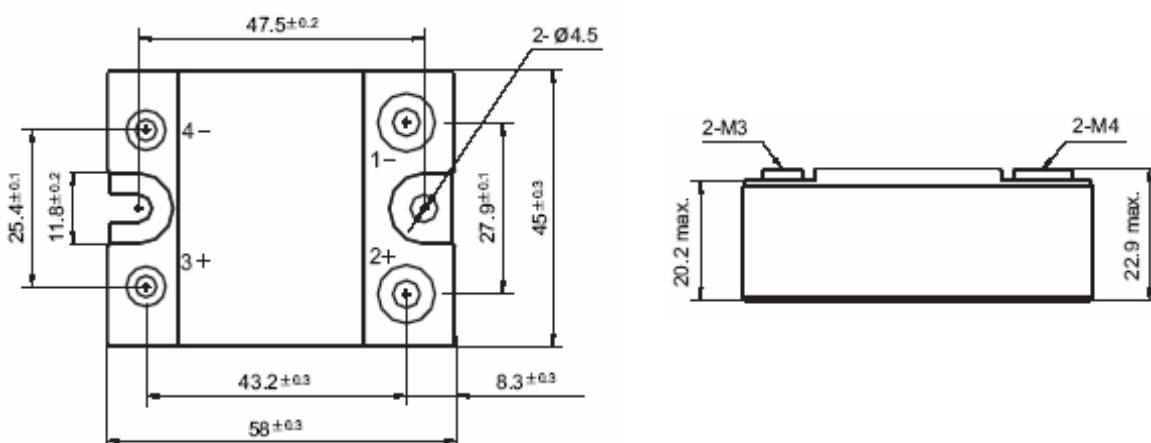
Control Voltage Range	4-32VDC
Minimum Turn-On Voltage	4VDC
Minimum Turn-Off Voltage	1VDC
Maximum Input Current	28mA@32VDC
Maximum Reverse Voltage	32VDC

#### Output Circuit

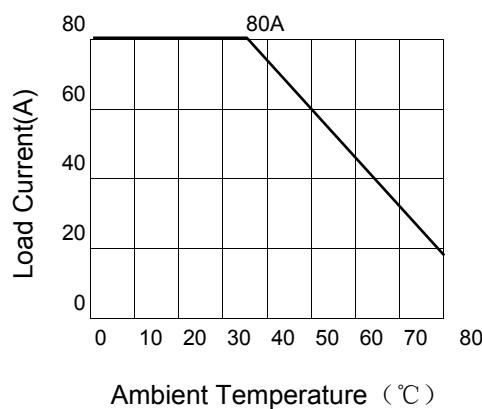
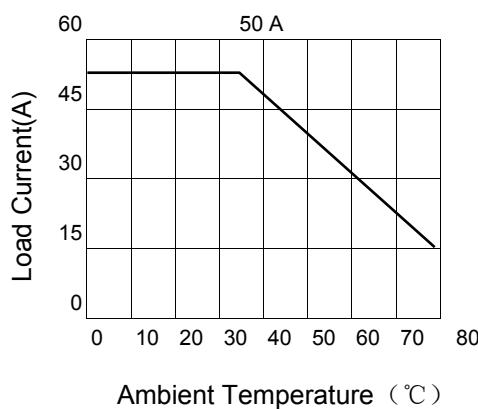
Line Voltage Range	0-30VDC	
	50A	0.02 - 50A
Load Current Range	80A	0.02 - 80A
	100A	0.02 - 100A

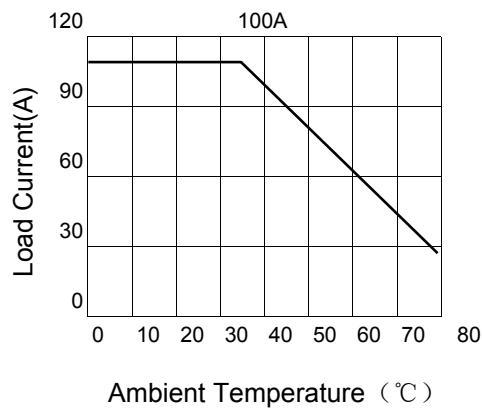
Maximum Surge Current(@10ms)	50A 80A 100A	100A 200A 260A
Maximum Turn-On Time		1mS
Maximum Turn-Off Time		500μS
Maximum Off-State Leakage Current [@ Rated Voltage]		0.1mA
Maximum On-State Voltage Drop [@ Rated Current]		0.60V
<b>General Information</b>		
Dielectric Strength, Input/Output/Base (50/60Hz)		≥4000Vrms
Ambient Operating Temperature Range		-40°C ~ +80°C
Ambient Storage Temperature Range		-40°C ~ +100°C
Weight (typical)		85g
<b>Application</b>		
Suitable for DC heating, DC power, DC valve, DC motor, solar energy and so on.		

## Installation



## Thermal Curve





### Important Notice

1. Suppression circuit will be added when used for inductive load.
2. Control polarity shall be correct, or may damage the product.
3. Load current performance will decline when the ambient temperature is over 40°C.

### Product Certification



## LKK DC SOLID STATE RELAY-SSR-D30100D(SSR-D06100D)



### Features

- Photo isolation
- Can provide the transparent protective cover
- 4000V dielectric strength
- MOS output
- Environmental friendly product(RoHS compliant)
- Outline:57.4mm×45.7mm×23mm

### INPUT(TA=25°C)

Control voltage range	3-32VDC
Must operate voltage	3VDC
Must release voltage	0.1VDC
TYP input current	12mA
Max input current	15mA
Max. reverse voltage	-32VDC

### GENERAL(TA=25°C)

Dielectric strength	4000V(Input/Output) 2500V(Input/Output/Base)
Insulation resistance	1000MΩ(500VDC)
Operating temp.	-30°C~80°C
Storage temp.	-30°C~100°C
Unit weight	Approx. 110g

### OUTPUT(TA=25°C)

Load voltage	5-60VDC
Max transient voltage	60Vpk
Max off-state leakage current	1mA
Max off-state voltage drop	0.8Vrms(Type C)/1.8Vrms
Load current	100A

Max surge current	300A(10ms) 300% Rated current
Min power factor	0.5
Max turn-on time	1ms
Max turn-off time	2ms

### OUTLINE DIMENSIONS (Unit:mm)

