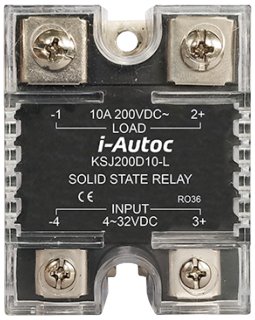
Product Description

- 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 30:0-24VDC 50:0-36VDC 60:0-48VDC 100:0-75VDC 200:0-120VDC 400:3-300VDC 600:3-500VDC 1200:3-700VDC	DC Control	Load Current 7: 7Amp 10: 10Amp 20: 20Amp 25: 25Amp 40: 40Amp 50: 50Amp 80: 80Amp 100: 100Amp	LED Indicator	Customized Code

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

	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							

General Specifications

Input Specifications (Ta=25℃)	
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

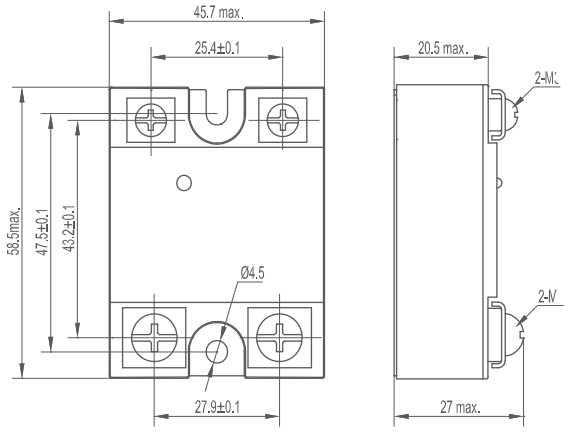
Output Specifications (Ta=25℃)																				
Ordering Information	KSJ30D□-L		KSJ50D□-L		KSJ60D□-L		KSJ100D□-L			KSJ200D□-L			KSJ400D25-L	KSJ600D□-L		KSJ1200D□-L	
	50	100	40	80	7	50	20	40	80	10	20	40		25	50	25	50
Transistor Voltage (VDC)	55		75		100		150			250			600	1200		1200	
Load Voltage Range (VDC)	0-24		0-36		0-48		0-75			0-120			3-300	3-500		3-700	
TVS Breakdown Voltage Scope (V)	37.1-41		53.2-58.8		64.6-71.4		105-116			190-210							
MOV Protective Voltage Scope (V)													423-517	675-825		738-902	
Maximum Load Current (A)	50	100	40	80	7	50	20	40	80	10	20	40	25	25	50	25	50
Maximum Surge Current (Apk.@10ms)	150	250	120	200	30	150	60	120	200	30	60	120	75	75	150	75	150
Maximum On-State Resistance (mΩ)	4.2	2.1	12	6	14	7	13	13	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)	0.3												1				
Maximum Turn-off Time (ms)	0.3												1				

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

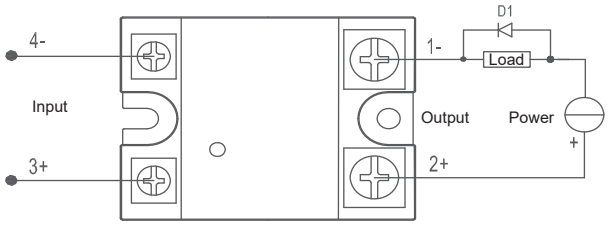
Applications

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

Outline Dimensions/Wiring Diagram



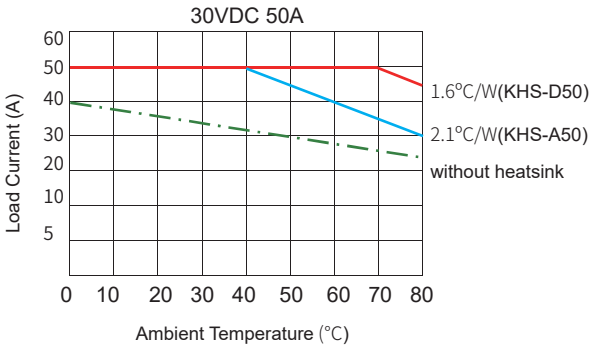
Outline Dimensions

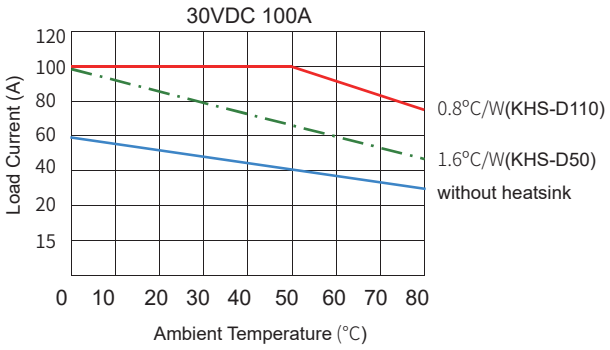


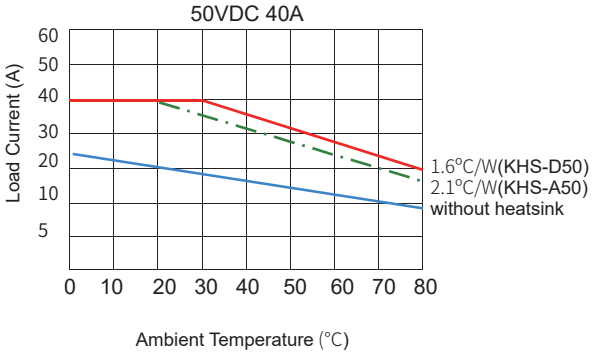
When the relay is used for inductive load control, please be sure to use a suppression circuit, just like the drawing above. Both load terminals are inverse parallelled with a fly-wheel diode D1.
D1: Fast Recovery Diode

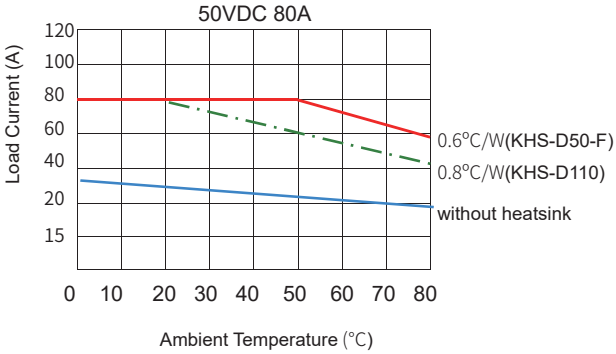
Wiring Diagram

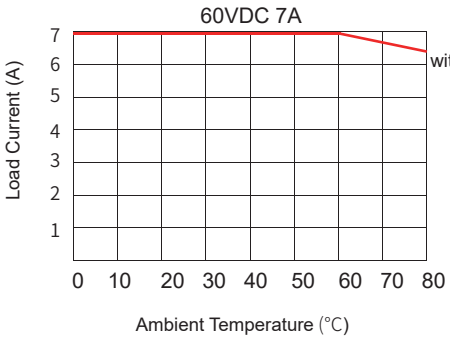
Thermal Derating Curve

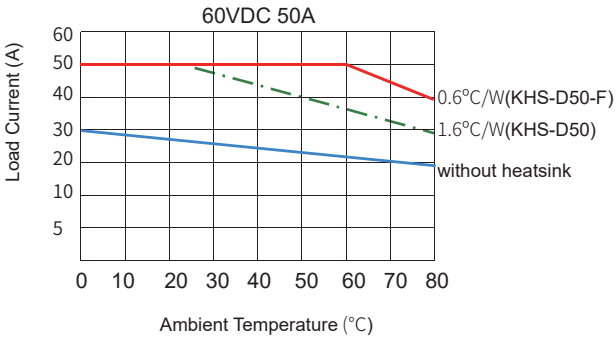


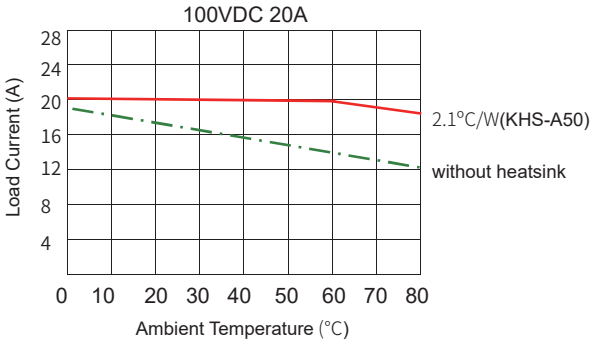


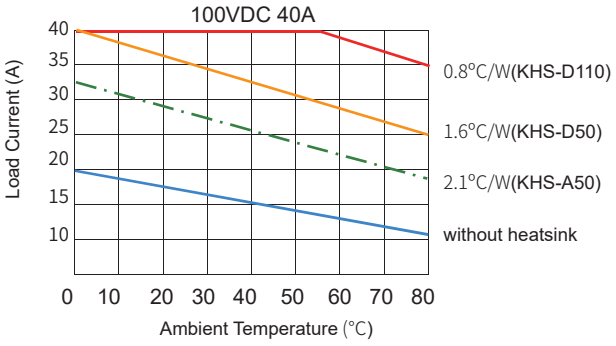




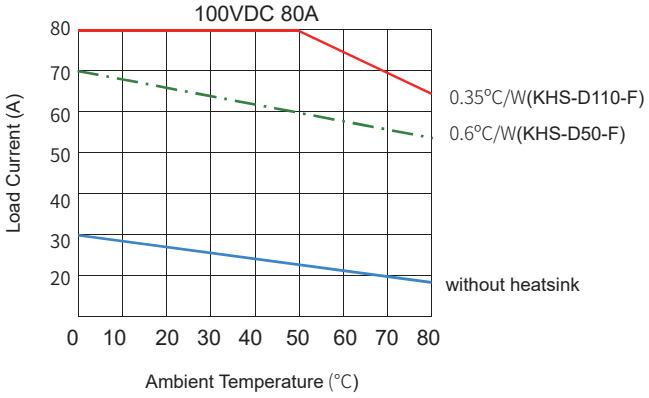




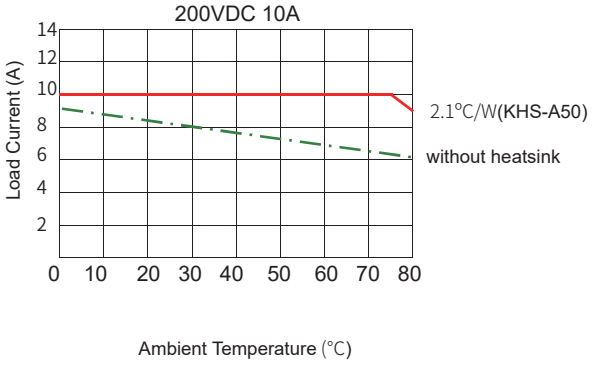




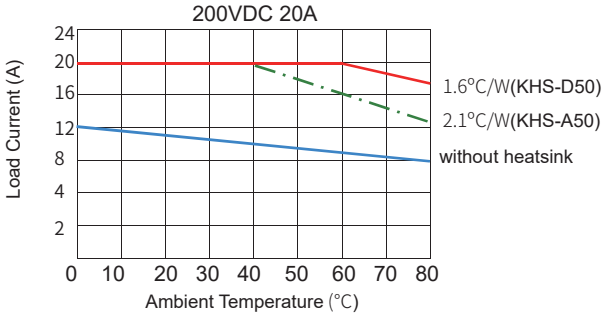
100VDC 80A



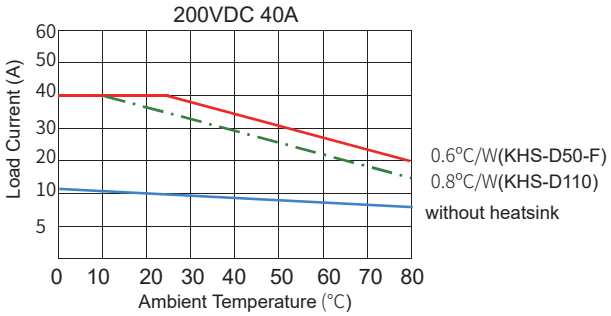
200VDC 10A



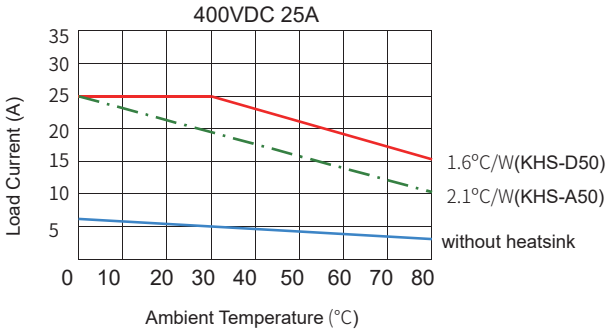
200VDC 20A



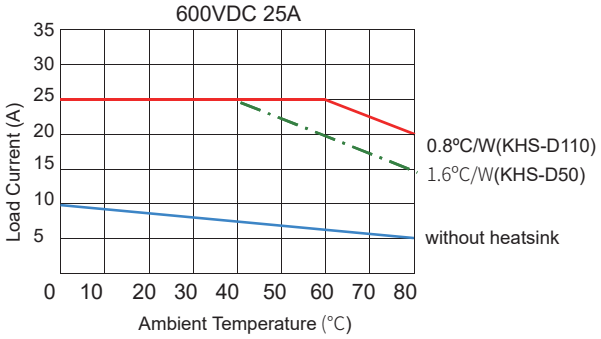
200VDC 40A



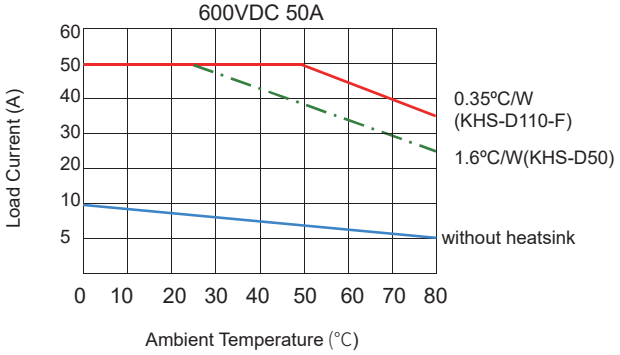
400VDC 25A



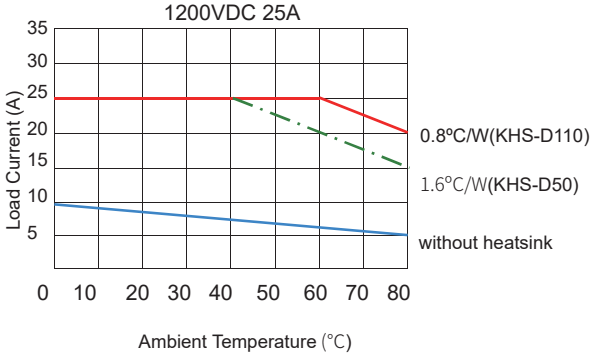
600VDC 25A

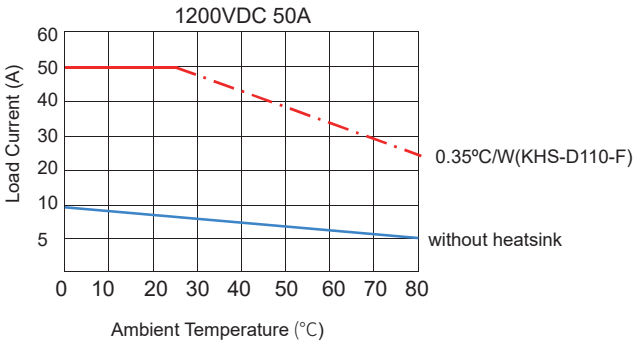


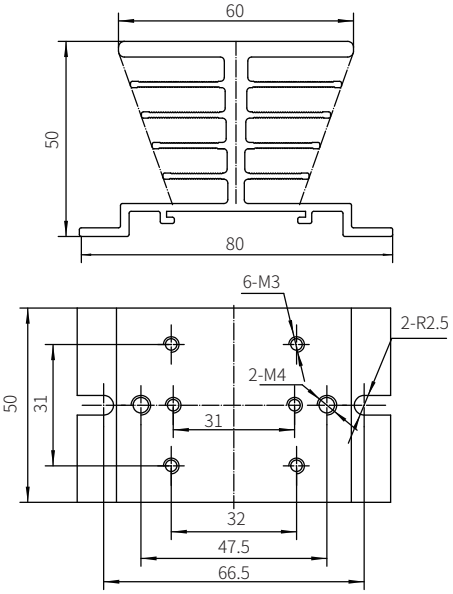
600VDC 50A



1200VDC 25A

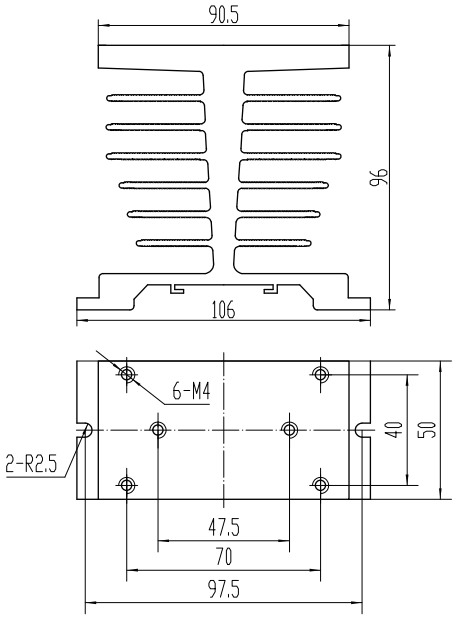




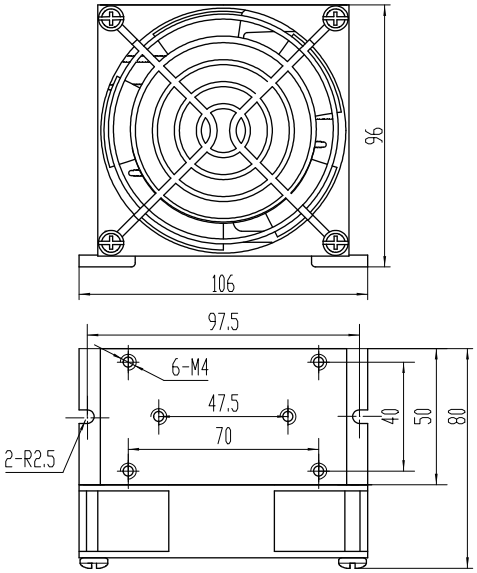


KHS-A50

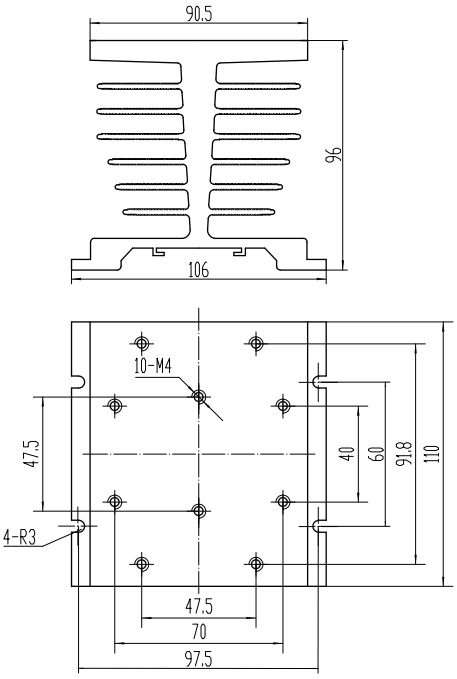
(Note：The recommended mounting hole size is 68mm)



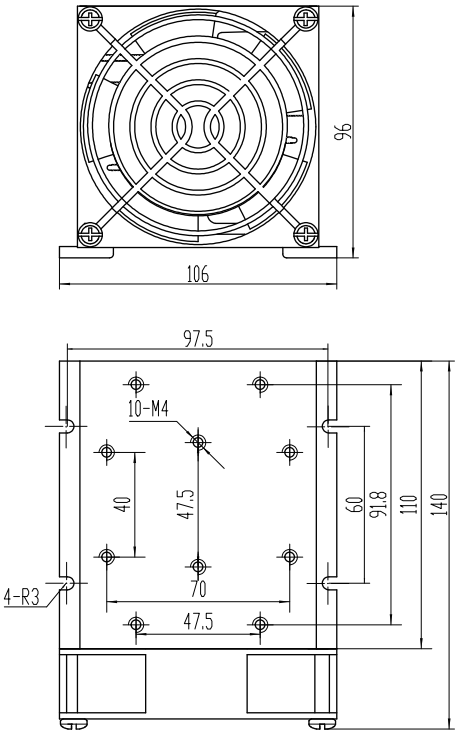
KHS-D50



KHS-D50-F



KHS-D110



KHS-D110-F

General Notes

1. Relay must be mounted to proper sized beat 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/Nm.
2. When connection wiring to SSR, please ensure screws are torqued down properly. Recommended torque for input screw is (13-15)/(1.5-1.7) in-lb/Nm, output screw is (18-20)/(2.0-2.2) in-lb/Nm).
3. SSR's carrying load capacity is related to the operation ambient temperature and heat dissipation condition, please refer to the Thermal Derating Curve for derating.
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 parallelled 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.

