



CE

## Features

- MOSFET output
- Photoelectric isolation
- Low on-state resistance
- Dielectric strength 2500V
- Panel mount
- Input DC control

## Output Parameter (Ta = 25°C)

	D-30D□-□		D-50D□-□		D-100D□-□			D-150D□-□	D-200D□-□		D-400D□-□	D-500D□-□	
	50	100	40	80	20	40	80	50	10	40	10	7	12
Load voltage range	(0~30)VDC		(0~50)VDC		(0~100)VDC			(0~150)VDC	(0~200)VDC		(0~400)VDC	(0~500)VDC	
Load current range	0.02 -50A	0.02 -100A	0.02 -40A	0.02 -80A	0.02 -20A	0.02 -40A	0.02 -80A	0.02 -50A	0.02 -10A	0.02 -40A	0.02 -10A	0.02 -7A	0.02 -12A
Max.off-state leakage current	0.1mA		0.1mA		0.1mA			0.1mA	0.1mA		0.1mA	0.1mA	
Max.on-state voltage drop	0.35V	0.35V	0.64V	0.64V	1.5V	1.5V	1.6V	0.6V	1V	1V	2.4V	1.9V	1.5V
Max.on-state resistance	7mΩ	3.5mΩ	16mΩ	8mΩ	75mΩ	37.5mΩ	20mΩ	12mΩ	105mΩ	35mΩ	0.24Ω	0.26Ω	0.125Ω
Max.turn-on time													1ms
Max.turn-off time													0.5ms
Max.surge current(10ms)	120Apk	240Apk	100Apk	200Apk	80Apk	160Apk	240Apk	200Apk	40Apk	130Apk	40Apk	30Apk	40Apk

## Input Parameter(Ta = 25°C)

Control voltage range	(3 ~ 32)VDC (Without LED) (4 ~ 32)VDC(With LED)
Must turn-on voltage	3 VDC (Without LED) 4 VDC(With LED)
Must turn-off voltage	1.0VDC
Max.input current	28mA (32VDC)
Max.reverse protection voltage	-32VDC

## GENERAL(Ta = 25°C)

Dielectric strength	2500VAC, 50Hz/60Hz, 1min, input,output to base 2500VAC, 50Hz/60Hz, 1min, input to output)
Insulation resistance	1000MΩ (500VDC)
Vibration resistance	10Hz ~ 55Hz 1.5mm DA
Shock resistance	980m/s <sup>2</sup>
Operating temperature	-30°C ~ 80°C
Storage temperature	-30°C ~ 100°C
Unit weight	Approx 100g

## DESCRIPTION

KS33 is a set of SPST-NO type DC output solid state relays, using common panel mounting, offer (3 ~ 32)VDC input control and use MOSFET output. It is available with switching current 50A at 30V, 100A at 30V, 40A at 50V, 80A at 50V, 20A at 100V, 40A at 100V, 80A at 100V, 50A at 150V, 10A at 200V, 40A at 200V, 10A at 400V, 7A at 500V and 12A at 500V etc.It is optical isolation between input and output, dielectric strength 2500VAC.

## PRECAUTIONS

- 1.Diode is a must for Inductive loads.
- 2.When choosing a SSR,please pay more attention to actual load current and ambient temperature. When the SSR is used for full load operation, we must install an adequate heatsink or take other effective cooling measures. When the ambient temperature is high, please refer to the curve of Max. Load Current vs Ambient Temperature for derating.
- 3.Apply heat-conducting silicon grease or a thermal transfer pad on the space between SSR and heat sink. Then, screw the heatsink firmly. In that case, it would keep the SSR from damaging by overheat.
- 4.Tighten the SSR terminal screws properly. If the screws are loose, the SSR will be damaged by heat generated from connections. Also, excessive screw mounting torque may damage relay internal components. We recommended screw installation torque as follows: M4 screw mounting torque of (0.98~1.37)N · m, M3 screw mounting torque of (0.58~0.98)N · m.
- 5.Please do not use the relay beyond the descriptions in the datasheet.

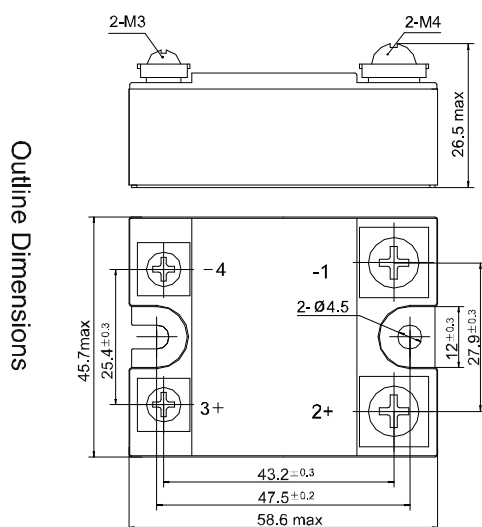
## ORDERING INFORMATION

Type	KS33 / D- 50 D 40 -L (XXX)				
Control voltage	D: (3 ~ 32)VDC (Without LED) (4 ~ 32)VDC (With LED)				
Load voltage	30: 30V 200: 200V	50: 50V 400: 400V	100: 100V 500: 500V	150: 150V	
Load voltage form	D: DC				
Load current	7: 7A	10: 10A	12: 12A	20: 20A	40: 40A 50: 50A 80: 80A 100: 100A
LED indicator	L: With LED Nil: Without LED				
Customer special code					

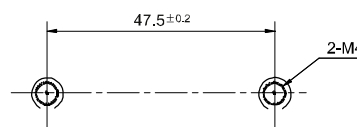
Notes: Available parts are: KS33/D-30D50-□、KS33/D-30D100-□、KS33/D-50D40-□、KS33/D-50D80-□、KS33/D-100D20□、KS33/D-100D40-□、KS33/D-100D80-□、KS33/D-150D50-□、KS33/D-200D10-□、KS33/D-200D40-□、KS33/D-400D10-□、KS33/D-500D7-□、KS33/D-500D12-□。

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND MOUNTING HOLES

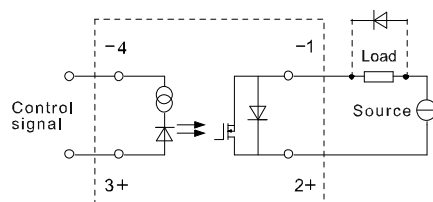
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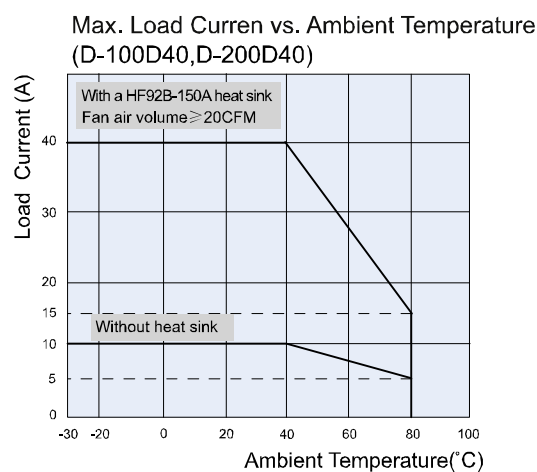
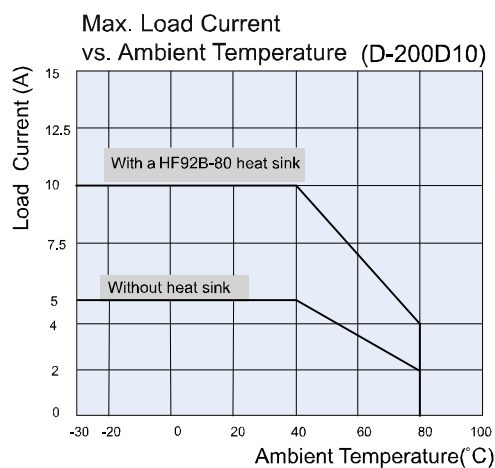
### Mounting Holes



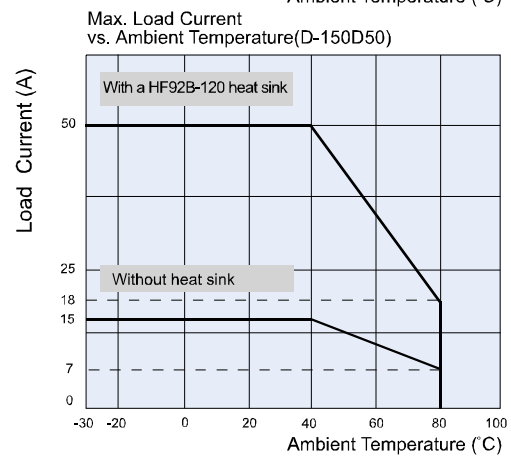
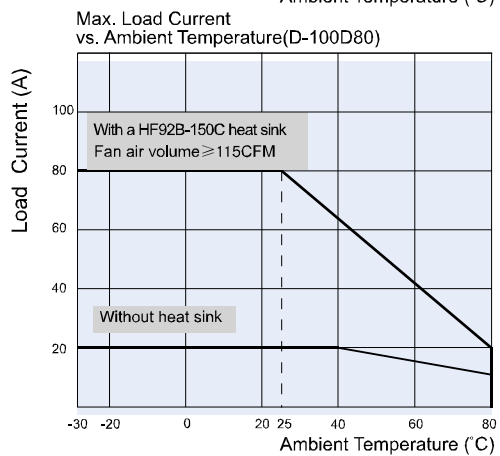
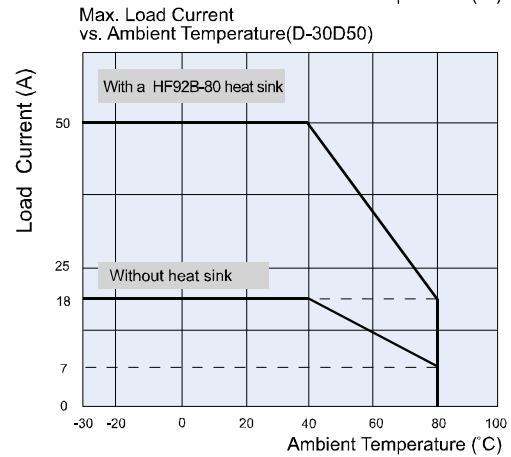
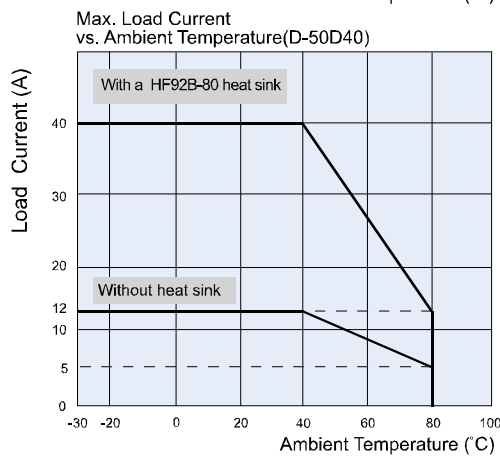
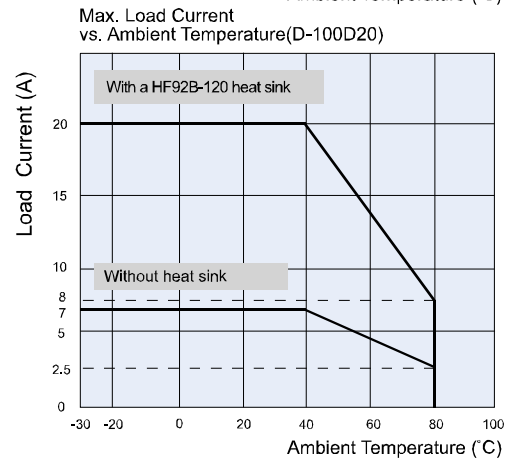
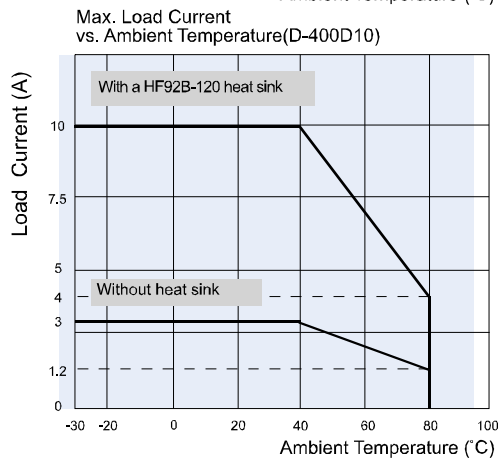
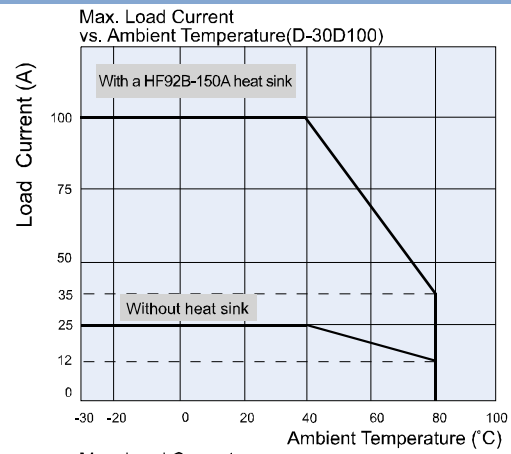
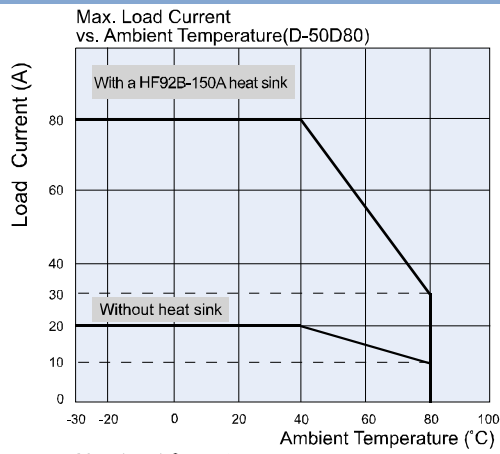
### Wiring Diagram



## CHARACTERISTIC CURVES

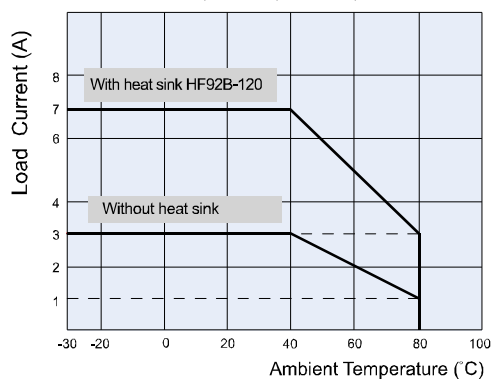


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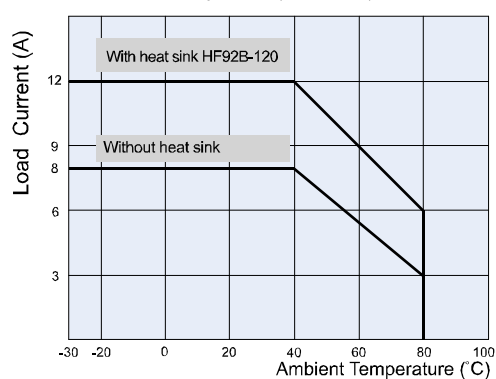


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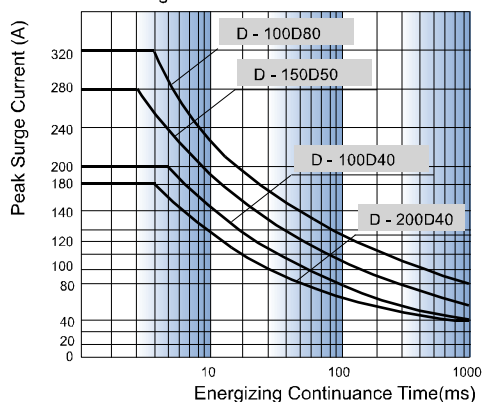
Max. Load Current  
vs. Ambient Temperature(D-500D7)



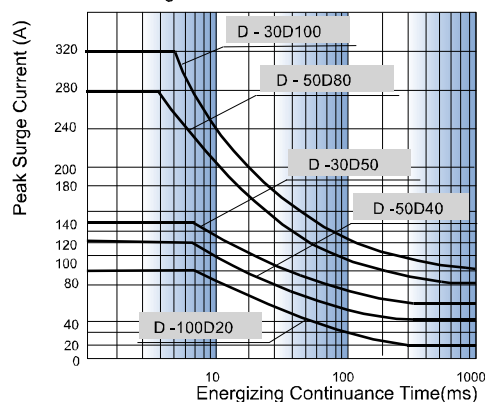
Max. Load Current  
vs. Ambient Temperature(D-500D12)



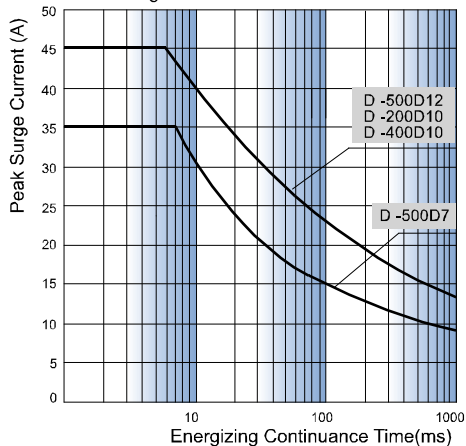
Max. Permissible Non-repetitive  
Peak Surge Current vs. Continuance Time



Max. Permissible Non-repetitive  
Peak Surge Current vs. Continuance Time



Max. Permissible Non-repetitive  
Peak Surge Current vs. Continuance Time



### Disclaimer:

This datasheet is for the customers' reference. All the specifications are subject to change without notice. Jinxinrong could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Jinxinrong for the technical service. However, it is the user's responsibility to determine which product should be used only.