

# DC Solid State Relay



SCHWARTZ-ELECTRONIC VERTRIEB GMBH



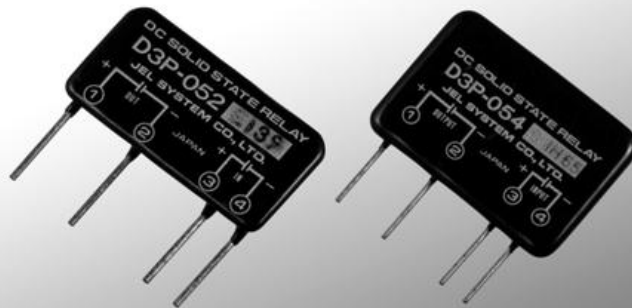
MEISENWEG 8

23611 BAD SCHWARTAU

FAX: +49 451 595010 TEL.: +49 451 54444  
www.s-ev.de info@s-ev.de

# D3P

SERIES



## Features

- Small size, Resin casted molding type
- Available for PCB high-density packaging
- Max. load current at 2 A, 4 A
- SSR for DC load
- Dielectric strength between input and output at 2,500 V/1 min.

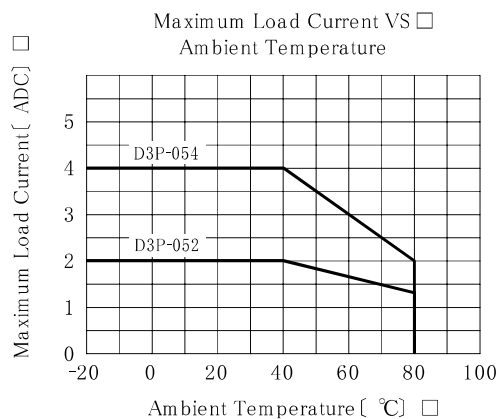
## Type Information

**D 3 P - 0 5 2**

Rated Load Voltage  
05 : 3 ~ 50 V ( Pure DC )

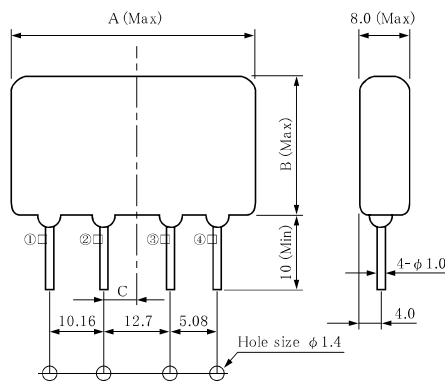
Max. load current  
2 : 2 A  
4 : 4 A

## Characteristics



※ Description in the catalogue is subject to change without notice. Please read the specifications thoroughly before using.  
※ Please contact JEL SYSTEM for further information.

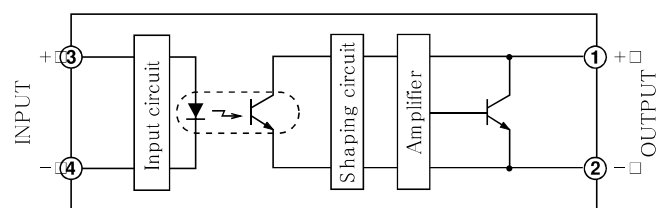
Dimensions ( mm )



Model	Size	A	B	C
D3P-052		35	21	3.8
D3P-054		41	32	4.7

Dimensions For PCB Design

Equivalent Circuit



※Description in the catalogue is subject to change without notice. Please read the specifications thoroughly before using.  
 ※Please contact JEL SYSTEM for further information.

■ Ratings

( Ta = 25 °C )

	Item	Symbols	D3P-052	D3P-054	Units
Output	Maximum Load Voltage	V <sub>OMAX</sub>	50		V <sub>DC</sub>
	Load Voltage Range	V <sub>O</sub>	Pure DC	3 ~ 50	V <sub>DC</sub>
			Bridge Rectification	3.5	V <sub>rms</sub>
	Maximum Load Current	I <sub>OMAX</sub>	2	4	A <sub>DC</sub> /A <sub>rms</sub>
Surge Current Ratings	I <sub>SURGE</sub>	3 ( 1 sec )	10 ( 0.1 sec )	A	
Input	Maximum Input Voltage	V <sub>IMAX</sub>	24		V <sub>DC</sub>
	Input Impedance	R <sub>IN</sub>	1500 ± 20 %		Ω
General	Dielectric Strength	V <sub>ISO</sub>	2,500 /1 min.( Between input and output)( Rh40 ~ 60 %)		V <sub>ACrms</sub>
	Isolation Resistance	R <sub>ISO</sub>	10 <sup>8</sup> and above DC500V( Between input and output)( Rh40 ~ 60 %)		Ω
	Operating Temperature Range	T <sub>OPR</sub>	-20 ~ +80		°C
	Storage Temperature Range	T <sub>STG</sub>	-30 ~ +100		°C

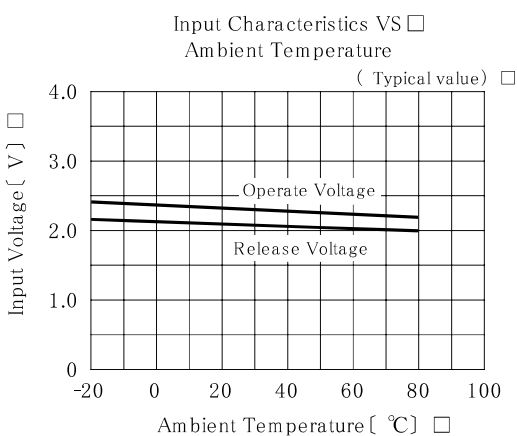
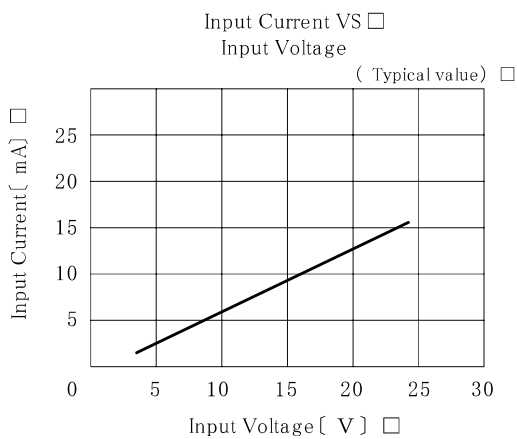
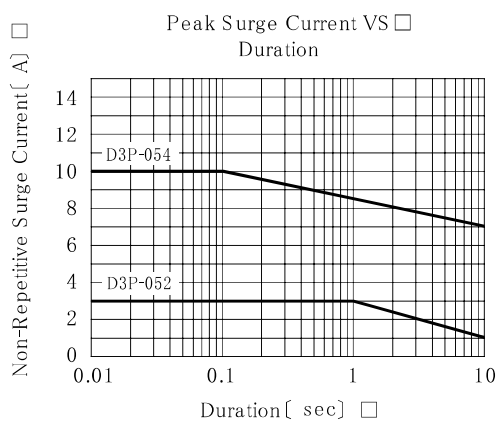
■ Electrical Characteristics

( Ta = 25 °C )

	Item	Symbols	D3P-052	D3P-054	Units
Output	Off State Leakage Current	I <sub>LEK</sub>	1.0 and below ( V <sub>o</sub> = 50V )		μA <sub>DC</sub>
	On State Voltage Drop	V <sub>SAT</sub>	1.2 and below		V <sub>DC</sub>
	Minimum Load Current	I <sub>OMIN</sub>	1		mA
Input	Input Voltage Range	V <sub>I</sub>	3.5 ~ 24		V <sub>DC</sub>
	Operate Voltage	V <sub>P</sub>	3.5 and below		V <sub>DC</sub>
	Release Voltage	V <sub>D</sub>	1 and above		V <sub>DC</sub>
General	Operate Time	T <sub>ON</sub>	0.5 ms and below ( Resistance load )		
	Release Time	T <sub>OFF</sub>	0.5 and below ( Resistance load )		
	Capacitance	C <sub>IO</sub>	15 and below		PF

※ Description in the catalogue is subject to change without notice. Please read the specifications thoroughly before using.

※ Please contact JEL SYSTEM for further information.



※Description in the catalogue is subject to change without notice. Please read the specifications thoroughly before using.  
 ※Please contact JEL SYSTEM for further information.