



**Electronic Design & Research**  
http://www.vsholding.com

*Technology for people's ideas*

# D4N200D8/24/NN

## Powerful Subminiature Solid State Relay/Switch

Designed to control 8 A, 200 VDC in microseconds

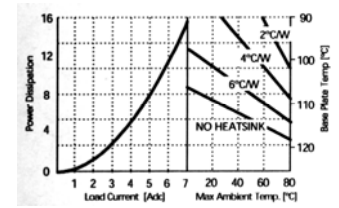
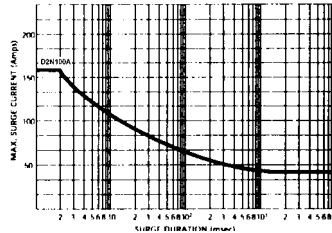
**Features:** Utilizes only 1.84 sq. in. of PCB area and only 1.2" tall  
8 Amp continuous or up to 16 Amp-pick in miniature size  
High sensitivity, even at a high switching frequency  
300 A surge current, and only 40 mill-Ohms low on-state resistance  
24V input, and only 20 mA

### Input Specifications:

Input DC Voltage	24 VDC or 12 VDC
Nominal Current, at 10 Hz	12mA      18mA
Maximum Current, at 1 KHz	13 mA      20mA
Maximum Current, at 25 KHz	16 mA      23mA

### Output Specifications:

Operating DC voltage range	0 – 200 VDC
Maximum continuous current	8 A no heat-sink
Maximum surge current (IDM)	300 A @ 0.01mS
Continues current (ID)	120 A @ 1.0ms
Maximum on-state resistance	0.080 Ohm
Rising time	0.5 μS
Delay-on time	1 μS
Falling time	0.2 μS
Delay-off time	1 μS
Maximum switching frequency	25.0 KHz

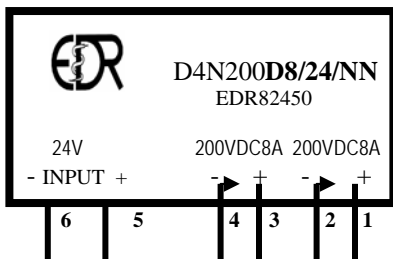
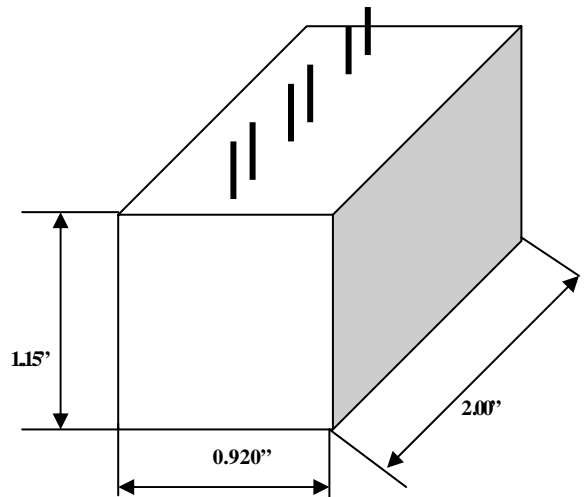
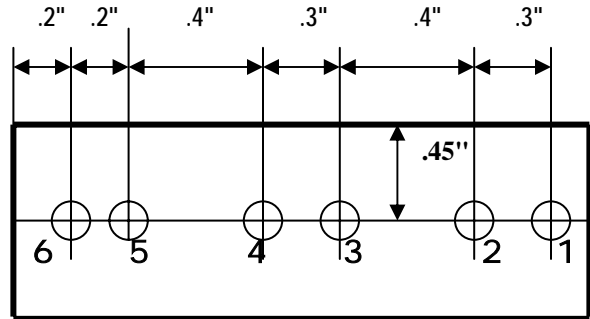


### General Specifications:

Ambient operating temperature range	-50° C to 55° C
Ambient storage temperature range	-40° C to 150° C
Dialectic Strength input-to-output	1000VAC
Dialectic Strength between open contacts	200VAC

### Mechanical Specifications:

Weight(oz)	.5
Encapsulation	ResTech 10207/053
Terminals	.040"
Dimensions	.1.15"Hx2.0"Lx.92"W
Terminals -Solder	.040" diameter



Transient Protection: All loads are inductive, even ones that are not so obvious or labeled. An inductive load produces a harmful transient voltage, which is much higher than the applied voltage, when it is turned on and off. A SSR built with a MOSFET output acts as an ideal switch and can produce a seemingly "non-inductive" load, which can cause damage if not suppressed. A transient voltage suppressor, which is bi-directional for an AC applied voltage and unidirectional for a DC applied voltage, should be used to clamp excessive spikes.

**Electronic Design & Research Inc. \*\* 7331 Intermodal Dr. \*\* Louisville \*\* KY 40258**

Tel: 502-933-8660; Fax: 502-933-3422; Sales: 800-336-1337; e-mail: vsholding@vsholding.com