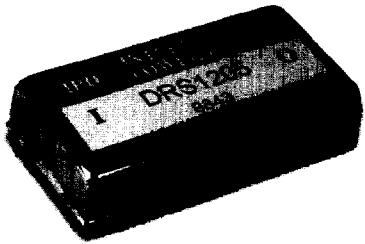


## **key features**

- industry standard 1 x 2 package
- industry standard pin out
- 85C case operation
- short circuit protection
- 5V, 12V, 24V, 28V, and 48V inputs
- input pi filter and 6 side shield
- regulated outputs
- 500V isolation



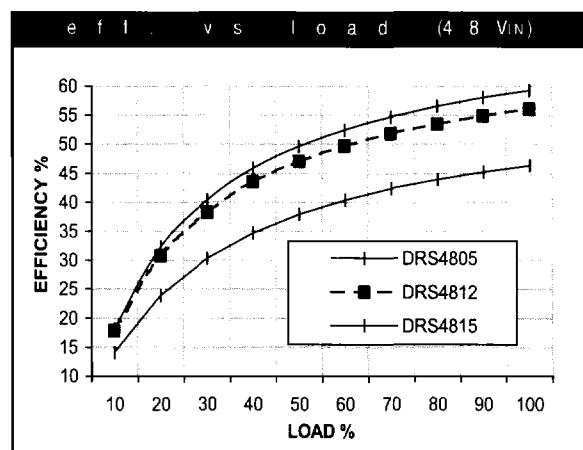
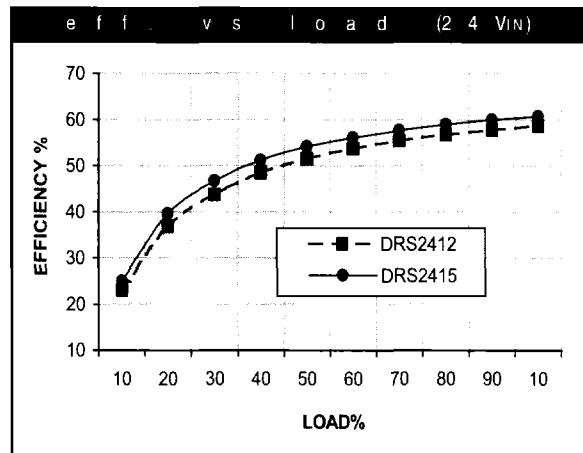
The DRS series converters offer excellent regulation and isolation in the industry standard 1 x 2 package. Available in several input versions, the DRS is perfect for industrial, datacom, or telecom applications. The DRS features shortcircuit protection, and 500VDC of isolation. Several output voltages are available, please see the DRD series for dual output applications.

## **technical specifications**

input	
voltage range	5V, 12V, 24V, 28V, and 48V Nominal See selection chart for specific input range
reflected ripple reverse input current	20% $I_{IN}$ max. 100% $I_{IN}$ max.

output	
setpoint accuracy	$\pm 4\%$
line regulation $V_{IN}$ min. - $V_{IN}$ max., $I_{OUT}$ rated	$\pm 0.3\%$ $V_O$
load regulation $I_{OUT}$ min. - $I_{OUT}$ max., $V_{IN}$ nom.	$\pm 0.5\%$ $V_O$
minimum output current	10 %
short circuit protection <sup>1</sup>	continuous

general	
switching frequency	20 KHz
isolation	
input - output	500 VDC
input - case	500 VDC
output - case	500 VDC
isolation resistance - input to output	10 <sup>9</sup> Ohms
case temperature	
operating range	-25 to +85°C
storage range	-40 to +125°C
humidity max, non-condensing	95%
vibration, 3 axes, 5 min each	5 g, 10-55 Hz
safety	consult factory
weight (approx.)	1.4 oz.



## **notes**

<sup>1</sup> Continuous short circuit protection is provided. Long term continuous operation in this mode is not recommended. Converter will auto-restart once fault has been removed.

Specifications typically at 25°C, normal line, and full load - unless otherwise stated.

Specifications subject to change without notice.

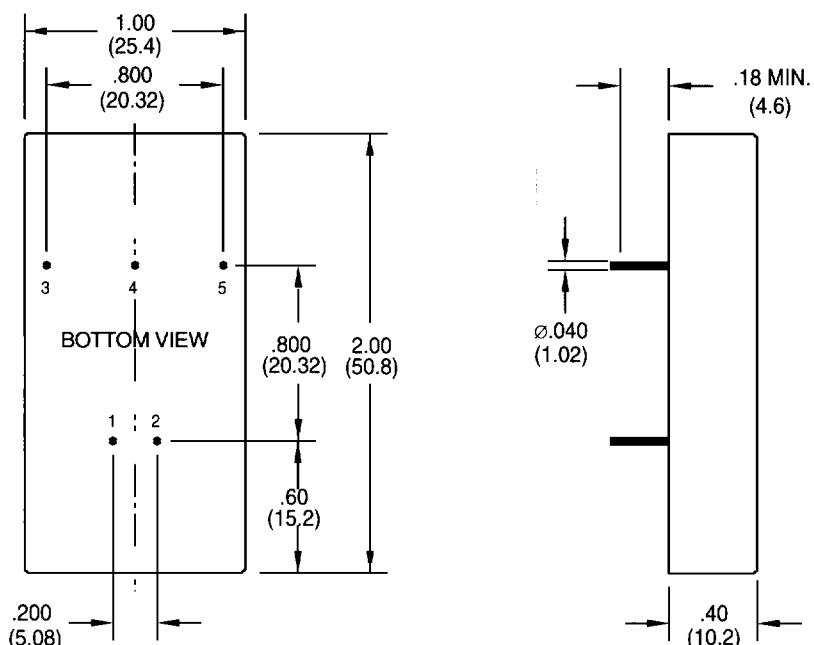
**m o d e l s**

V <sub>N</sub> (volts)	V <sub>N</sub> range (volts)	I <sub>IN</sub> max. (amps)	V <sub>OUT</sub> (volts)	I <sub>OUT</sub> rated (amps)	ripple & noise pk-pk (mV)	efficiency typ.**	model
5	4.65 - 5.50	0.61	5	.250	40	43%	DRS505
5	4.65 - 5.50	0.61	12	.160	40	57%	DRS512
5	4.65 - 5.50	0.61	15	.130	40	58%	DRS515
12	10.90 - 13.20	0.27	5	.250	40	43%	DRS1205
12	10.90 - 13.20	0.27	12	.160	40	50%	DRS1212
12	10.90 - 13.20	0.27	15	.130	40	55%	DRS1215
24	21.60 - 26.40	0.13	5	.250	40	45%	DRS2405
24	21.60 - 26.40	0.13	12	.160	40	58%	DRS2412
24	21.60 - 26.40	0.13	15	.130	40	58%	DRS2415
28	25.20 - 30.80	0.11	5	.250	40	45%	DRS2805
28	25.20 - 30.80	0.11	12	.160	40	50%	DRS2812
28	25.20 - 30.80	0.11	15	.130	40	55%	DRS2815
48	43.20 - 52.80	0.08	5	.250	40	46%	DRS4805
48	43.20 - 52.80	0.08	12	.160	40	54%	DRS4812
48	43.20 - 52.80	0.08	15	.130	40	55%	DRS4815

\* max input current at minimum input voltage, maximum rated output power

\*\* at nominal V<sub>N</sub>, rated output

**m e c h a n i c a l      d r a w i n g**



t h e r m a l i m p e d a n c e	
natural convection	15.4 C/W
100 LFM	12.2 C/W
200 LFM	9.3 C/W
300 LFM	7.4 C/W
400 LFM	6.4 C/W

Thermal impedance data is dependant on many environmental factors. The exact thermal performance should be validated for specific application.

p n	f u n c t o n
1	-V <sub>IN</sub>
2	+V <sub>IN</sub>
3	-V <sub>OUT</sub>
4	no pin
5	+V <sub>OUT</sub>

t o e ' r a c e s (unless otherwise specified)	
<b>Inches</b>	<b>(Millimeters)</b>
.XX ± .040	.X ± 1.0
.XXX ± .010	.XX ± .25
<b>Pin:</b>	
± .002	± .05