

**SINGLE
1.5 WATT**

BRS SERIES



key features

- industry standard DIP package
- industry standard pin out
- 85°C case operation
- short circuit protection
- 5V Input
- input LC filter
- regulated outputs
- 500V isolation

The BRS series converters offer excellent regulation and isolation in the industry standard DIP package. The 5 Volt input BRS is perfect for industrial and EDP applications. The BRS features short circuit protection and has 500VDC of isolation. Several output voltages are available, please see the BRD series for dual output applications.

technical specifications

input

voltage range	4.65 - 5.50 VDC
5VDC nominal	
reflected ripple	20% I_{IN} max.
reverse input current	100% I_{IN} max.
no load input power	0.80W

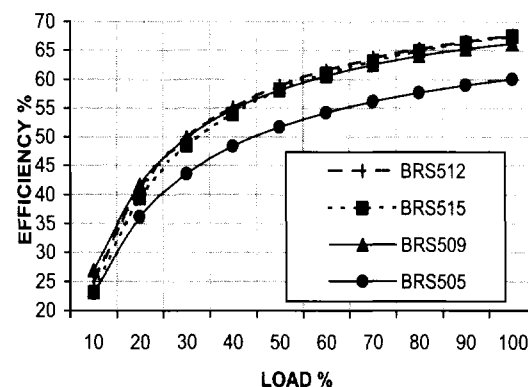
output

setpoint accuracy	±4%
line regulation V_{IN} min. - V_{IN} max., I_{OUT} rated	±0.5% V_O
load regulation I_{OUT} min. - I_{OUT} max., V_{IN} nom.	±0.5% V_O
minimum output current	0 %
short circuit protection ¹	continuous

general

switching frequency	200 KHz
isolation	
input - output	500 VDC
isolation resistance - input to output	10 ⁹ Ohms
case temperature	
standard operating range	-25 to +85°C
industrial range (add -I to p/n)	-40 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.)	0.6 oz.

eff. vs load (5 V_{IN})



notes

¹ 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.

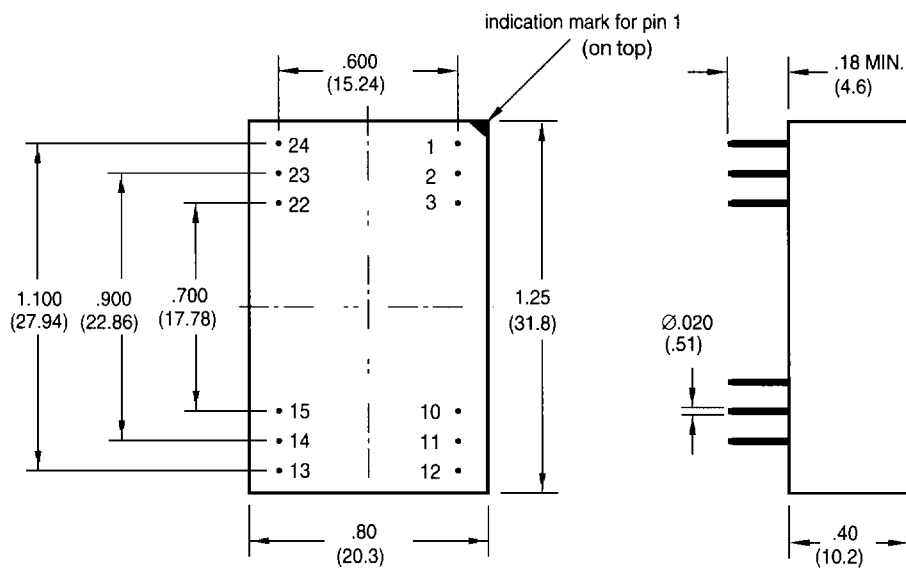
models

V _{IN} (volts)	V _{IN} range (volts)	I _{IN} max (amps)	V _{OUT} (volts)	I _{OUT} rated (amps)	ripple & noise pk-pk (mV)	efficiency typ.**	model
5	4.65 - 5.50	0.75	5	.300	50	58%	BRS505
5	4.65 - 5.50	0.80	9	.200	90	64%	BRS509
5	4.65 - 5.50	0.77	12	.150	120	65%	BRS512
5	4.65 - 5.50	0.75	15	.120	150	65%	BRS515

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

** at nominal V_{IN}, rated output

mechanical drawing



BOTTOM VIEW

thermal impedance	
natural convection	23.6°C/W
100 LFM	16.7°C/W
200 LFM	13.1°C/W
300 LFM	9.4°C/W
400 LFM	8.5°C/W

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

pin	function
1 & 24	+V _{IN}
2 & 23	no conn.
3 & 22	no conn.
4 & 21	no pin
5 & 20	no pin
6 & 19	no pin
7 & 18	no pin
8 & 17	no pin
9 & 16	no pin
10 & 15	- V _{OUT}
11 & 14	+ V _{OUT}
12 & 13	- V _{IN}

tolerances (unless otherwise specified)	
inches	(Millimeters)
.XX ± .040	.X ± 1.0
.XXX ± .010	.XX ± .25
Pin:	
± .002	± .05