



BR Series of 1.0 to 2.1 Watt DC/DC Converters

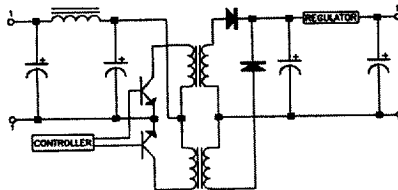


STANDARD DC/DC CONVERTERS WITH SINGLE OR DUAL REGULATED OUTPUTS. ALL MODELS FEATURE 24-PIN DIP COMPATIBLE CONFIGURATION, CONTINUOUS SHORT CIRCUIT PROTECTION AND AN INTERNAL LC INPUT FILTER TO REDUCE REFLECTED RIPPLE CURRENT. ALL MODELS FEATURE A PHENOLIC UL94V0-RATED CASE.



DIMENSIONS:
1.25" x 0.80" x 0.52"
(31.75) x (20.32) x (13.21)mm

BLOCK DIAGRAM



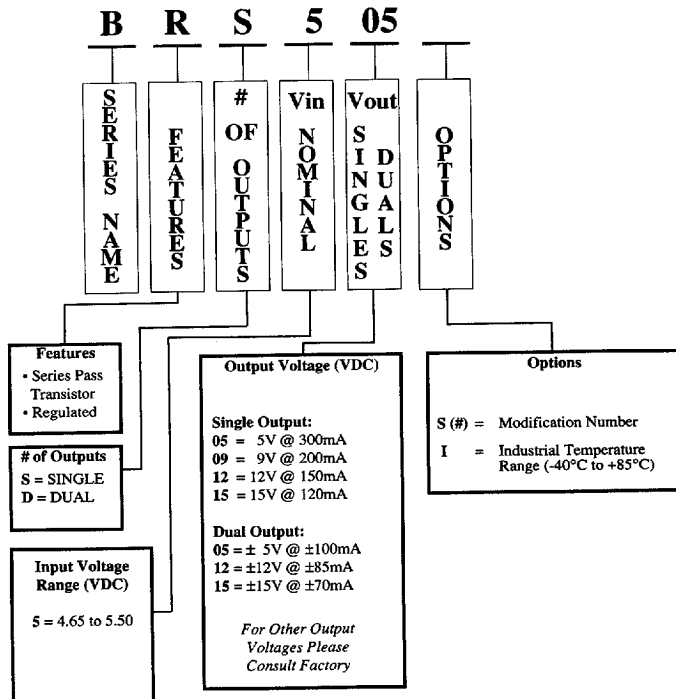
FEATURES

- Industry Standard Pin Out
- 500 VDC I/O Isolation
- Continuous Short Circuit Protection
- LC Input Filter

APPLICATIONS

- A/D-D/A Converters
- RS-232 Drivers
- Industrial Control Circuit
- Operational Amplifiers
- Bias Power For RAMs, ROMs, PROMs

PART NUMBER SELECTION GUIDE



INTERNATIONAL POWER DEVICES, INC.
20 Linden Street, Boston, MA 02134 • Phone: (617)782-3331 • Fax: (617)782-7416



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PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS	NOTES:	
GENERAL:							
Switching Frequency	180	200	220	KHz		1. No derating required up to a maximum case temperature of 85°C. Internal Power Dissipation = $P_{out} * (1 - Eff) / Eff$. 2. Provided for input fuse selection. 3. Continuous Short Circuit Protection is provided. For dual output units the short circuit current on each individual output is equivalent to the short circuit current for a single output unit. 4. Long term continuous operation in this mode is not recommended. Converter will auto-restart once short has been removed.	
Isolation Voltage							
Input to Output	500			VDC			
Input to Case	500			VDC			
Output to Case	500			VDC			
Isolation Resistance							
Input to Output	10 ⁹			Ohms			
Isolation Capacitance							
Input to Output	80			pF			
Short Circuit Protection					Note 3		
ENVIRONMENTAL:							
Operating Temperature							
Commercial Grade	-25		85	°C	Note 1		
Storage Temperature	-40		125	°C	Ambient		
Operating Humidity			95	%	Non-Condensing		
Storage Humidity			95	%	Non-Condensing		
INPUT:							
Input Voltage							
5 Vin	4.65	5.00	5.50	VDC			
Input Current							
5 Vin			0.85	Amps	Note 2		
Input Ripple Current			20%	I _{in max}			
Reverse Input Current			100%	I _{in max}			
No Load Input Power			0.80	Watt			
OUTPUT:							
Singles:							
Voltage Accuracy			±4.00%	Vout	Full Load		
Load Regulation			±0.50%	Vout	0% to 100%		
Line Regulation			±0.50%	Vout	LL to HL		
Duals:							
Voltage Accuracy			±4.00%	Vout	Full Load		
+Vout			±4.00%	Vout	Full Load		
-Vout							
Load Regulation							
+Vout			±0.05%	Vout	0% to 100%		
-Vout			±0.05%	Vout	0% to 100%		
Line Regulation			±0.05%	Vout	LL to HL		
Temp. Coefficient			0.02%	/°C			
Voltage Stability			0.05%	Vout			
Ripple and Noise			1.00%	Vout	p-p, 20 MHz BW		

- All specifications typical at +25°C Nominal Line and Full Load unless otherwise noted.
- Specifications subject to change without notice.
- When measuring the output ripple it is recommended to place a 10 μF tantalum capacitor across each output.



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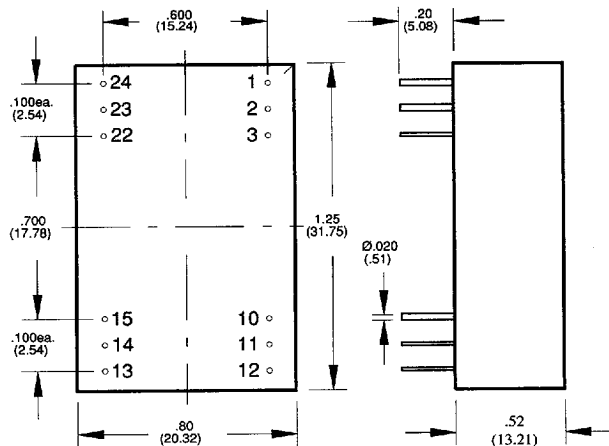
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PIN #	SINGLE	DUAL
1 & 24	+Vin	+Vin
2 & 23	No Connect	-Vout
3 & 22	No Connect	Com
4 & 21	No Pin	No Pin
5 & 20	No Pin	No Pin
6 & 19	No Pin	No Pin
7 & 18	No Pin	No Pin
8 & 17	No Pin	No Pin
9 & 16	No Pin	No Pin
10 & 15	-Vout	Com
11 & 14	+Vout	+Vout
12 & 13	-Vin	-Vin

BOTTOM VIEW

Mechanical tolerances are ± 0.04 "



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All dimensions are in inches (MM)



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