



BU Series of 1.0 to 2.1 Watt DC/DC Converters



STANDARD DC/DC CONVERTERS WITH SINGLE OR DUAL UNREGULATED OUTPUTS. ALL MODELS FEATURE 24-PIN DIP COMPATIBLE CONFIGURATION, SHORT TERM SHORT CIRCUIT PROTECTION AND AN INTERNAL LC INPUT FILTER. 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

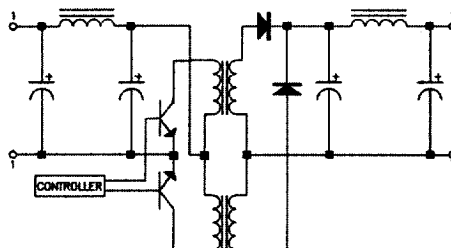
FEATURES

- Industry Standard Pin Out
- 500 VDC I/O Isolation
- LC Input Filter

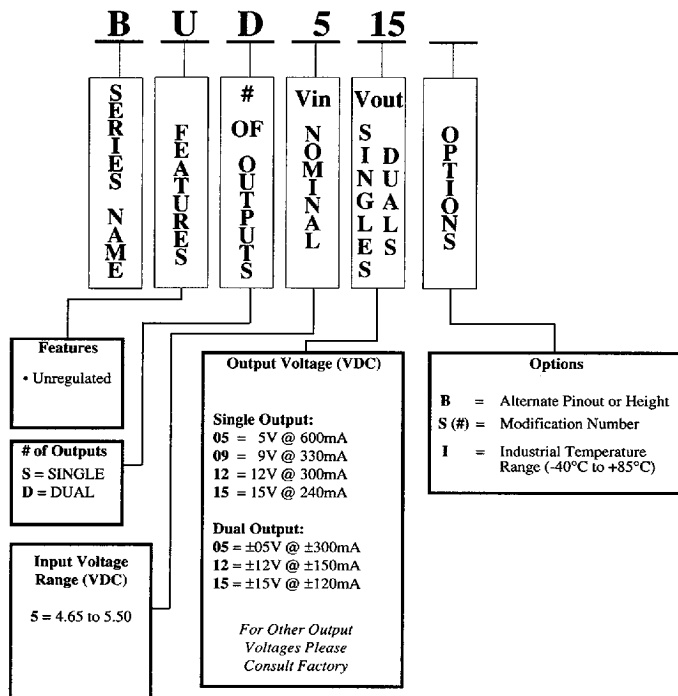
APPLICATIONS

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

BLOCK DIAGRAM



PART NUMBER SELECTION GUIDE



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



4853809 0000294 30T



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PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS	NOTES:
GENERAL:						
Switching Frequency	180	200	220	KHz		1. Noderating required up to a maximum case temperature of 85°C. Internal Power Dissipation = $P_{out} * (1 - \text{Eff}) / \text{Eff}$.
Isolation Voltage				VDC		
Input to Output	500			VDC		
Input to Case	500			VDC		
Output to Case	500			VDC		
Isolation Resistance				Ohms		2. Provided for input fuse selection.
Input to Output	10 ⁹					
Isolation Capacitance				pF		
Input to Output	80				Note 3	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.
Short Circuit Protection						
ENVIRONMENTAL:						
Operating Temperature						
Commercial Grade	-25		85	°C	Note 1	
Storage Temperature	-40		125	°C	Ambient	4. Long term continuous operation in this mode is not recommended. Converter will auto-restart once short has been removed.
Operating Humidity			95	%	Non-Condensing	
Storage Humidity			95	%	Non-Condensing	
INPUT:						
Input Voltage						
5 Vin	4.65	5.00	5.50	VDC		Note 2
Input Current						
5 Vin			0.97	Amps		
Input Ripple Current			20%	I _{in} max		
Reverse Input Current			100%	I _{in} max		
No Load Input Power			0.70	W		
OUTPUT:						
Singles:						
Voltage Accuracy			±4.00%	V _{out}	Full Load	20% to 100% LL to HL
Load Regulation			±12.00%	V _{out}		
Line Regulation			±1.20%	V _{out}		
Duals:						
Voltage Accuracy						
+V _{out}			±4.00%	V _{out}	Full Load	20% to 100% LL to HL
-V _{out}			±4.00%	V _{out}	Full Load	
Load Regulation						
+V _{out}			±12.00%	V _{out}		
-V _{out}			±12.00%	V _{out}		
Line Regulation			±1.20%	V _{out}		p-p, 20 MHz BW
Temp. Coefficient			0.02%	/°C		
Voltage Stability			0.05%	V _{out}		
Ripple and Noise			1.00%	V _{out}		

- All specifications typical at +25°C Nominal Line and Full Load unless otherwise noted.
- Specifications subject to change without notice.



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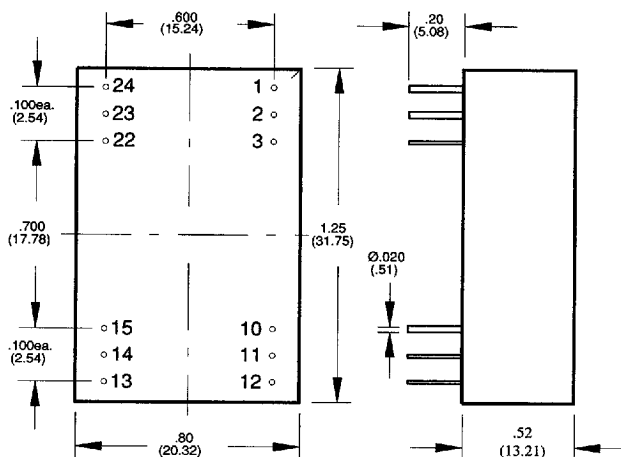
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PIN #	SINGLE	DUAL
1 & 24	+Vin	+Vin
2 & 23	No Connect	-Vout
3 & 22	No Connect	Common
4 & 21	No Pin	No Pin
5 & 20	No Pin	No Pin
6 & 19	No Pin	No Pin
7 & 18	No Pin	No Pin
8 & 17	No Pin	No Pin
9 & 16	No Pin	No Pin
10 & 15	-Vout	Common
11 & 14	+Vout	+Vout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

BOTTOM VIEW

Mechanical tolerances are $\pm 0.04"$



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All dimensions are in inches (MM)



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