



BU Series of 1.0 to 2.1 Watt DC-DC Converters

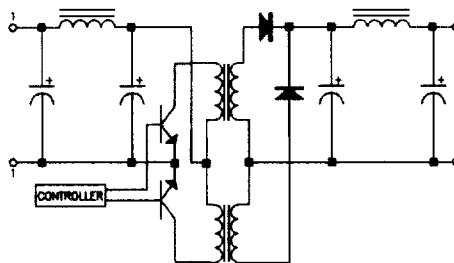


STANDARD DC/DC CONVERTERS WITH SINGLE OR DUAL UNREGULATED OUTPUTS. ALL MODELS FEATURE 24-PIN DIP COMPATIBLE CONFIGURATION, SHORT TERM SHORT CIRCUIT PROTECTION AND AN INTERNAL LC INPUT FILTER. ALL MODELS FEATURE A PHENOLIC UL94V0-RATED CASE.



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

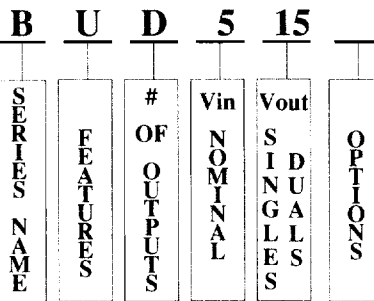
BLOCK DIAGRAM



FEATURES

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

PART NUMBER SELECTION GUIDE



Features
• Unregulated

of Outputs
S = SINGLE
D = DUAL

Input Voltage Range (VDC)
5 = 4.65 to 5.50

Output Voltage (VDC)

Single Output:
05 = 5V @ 600mA
09 = 9V @ 330mA
12 = 12V @ 300mA
15 = 15V @ 240mA

Dual Output:
05 = ±0.5V @ ±300mA
12 = ±1.2V @ ±150mA
15 = ±1.5V @ ±120mA

For Other Output Voltages Please Consult Factory

Options

B = Alternate Pinout or Height
S (#) = Modification Number
I = Industrial Temperature Range (-40°C to +85°C)

APPLICATIONS

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





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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 = $P_{out} * (1 - \text{Eff}) / \text{Eff}$.	
Isolation Voltage				VDC			
Input to Output	500			VDC			
Input to Case	500			VDC			
Output to Case	500			VDC			
Isolation Resistance				Ohms			
Input to Output	10 ⁹						
Isolation Capacitance				pF			
Input to Output	80						
Short Circuit Protection					Note 3		
ENVIRONMENTAL:							
Operating Temperature						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.	
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						4. Long term continuous operation in this mode is not recommended. Converter will auto-restart once short has been removed.	
5 Vin	4.65	5.00	5.50	VDC			
Input Current							
5 Vin			0.97	Amps	Note 2		
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		
Load Regulation			±12.00%	V _{out}	20% to 100%		
Line Regulation			±1.20%	V _{out}	LL to HL		
Duals:							
Voltage Accuracy							
+V _{out}			±4.00%	V _{out}	Full Load		
-V _{out}			±4.00%	V _{out}	Full Load		
Load Regulation							
+V _{out}			±12.00%	V _{out}	20% to 100%		
-V _{out}			±12.00%	V _{out}	20% to 100%		
Line Regulation			±1.20%	V _{out}	LL to HL		
Temp. Coefficient			0.02%	°C			
Voltage Stability			0.05%	V _{out}			
Ripple and Noise			1.00%	V _{out}	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.



INTERNATIONAL POWER DEVICES, INC.

6 Louisa Street, Boston, MA 02134 • Phone: 617-582-3351 • Fax: 617-582-7416

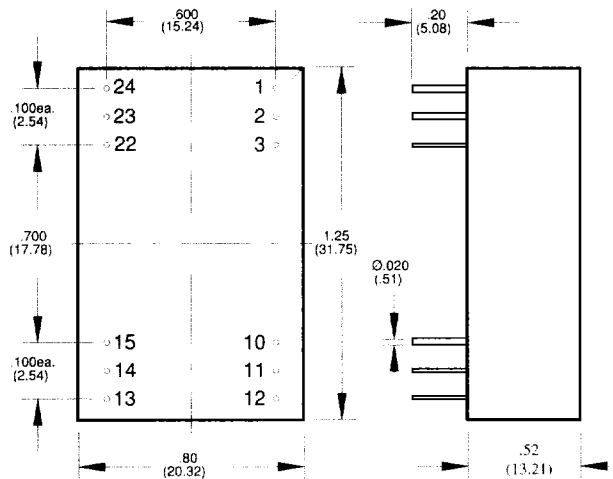




PIN #	SINGLE	DUAL
1 & 24	+Vin	+Vin
2 & 23	No Connect	-Vout
3 & 22	No Connect	Common
4 & 21	No Pin	No Pin
5 & 20	No Pin	No Pin
6 & 19	No Pin	No Pin
7 & 18	No Pin	No Pin
8 & 17	No Pin	No Pin
9 & 16	No Pin	No Pin
10 & 15	-Vout	Common
11 & 14	+Vout	+Vout
12 & 13	-Vin	-Vin

BOTTOM VIEW

Mechanical tolerances are $\pm 0.04"$



Specifications are subject to change without notice.

All dimensions are in inches (MM)

