



CUS & CUD Series of 1 Watt DC/DC Converters

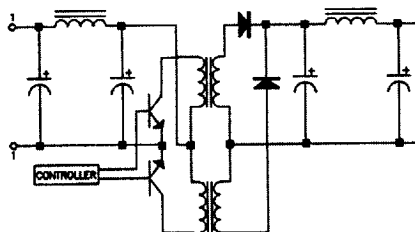


STANDARD DC/DC CONVERTERS WITH SINGLE OR DUAL UNREGULATED OUTPUTS. ALL MODELS FEATURE 24-PIN DIP COMPATIBLE CONFIGURATION. AN INPUT Π (Pi) FILTER IS STANDARD AND IS USED TO REDUCE REFLECTED RIPPLE CURRENT. ALL MODELS FEATURE A PHENOLIC UL94V0- RATED CASE.



DIMENSIONS:
1.25" x 0.80" x 0.40"
(31.75) x (20.32) x (10.16)mm

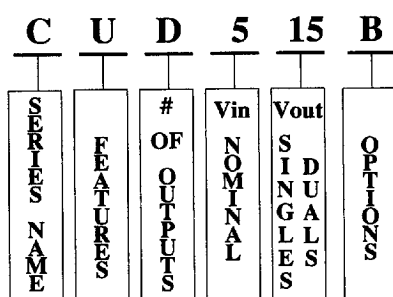
BLOCK DIAGRAM



FEATURES

- Industry Standard Pin Out
- Up to 78% Efficiency
- 500 VDC I/O Isolation
- Input Π (Pi) Filter

PART NUMBER SELECTION GUIDE



APPLICATIONS

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

Features • Unregulated	Output Voltage (VDC) Single Output: 05 = 5V @ 220mA 09 = 9V @ 150mA 12 = 12V @ 125mA 15 = 15V @ 100mA Dual Output: 12 = $\pm 12V$ @ $\pm 62mA$ 15 = $\pm 15V$ @ $\pm 50mA$ <i>For Other Output Voltages Please Consult Factory</i>	Options B = Alternate Pinout or Height S (#) = Modification Number I = Industrial Temperature Range (-40°C to +85°C)
# of Outputs S = SINGLE D = DUAL		
Input Voltage Range (VDC) 5 = 4.65 to 5.50 12 = 10.80 to 13.20		



INTERNATIONAL POWER DEVICES, INC.
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PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS	NOTES:	
GENERAL:							
Switching Frequency	36	40	44	KHz		1. Noderating required up to a maximum case temperature of 85°C. Internal Power Dissipation = Pout* (1-Eff) / Eff.	
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						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			
12 Vin	10.90	12.00	13.20	VDC			
Input Current							
5 Vin			0.33	Amps	Note 2		
12 Vin			0.13	Amps	Note 2		
Input Ripple Current			20%	Iin max			
Reverse Input Current			100%	Iin max			
No Load Input Power			0.50	W			
OUTPUT:							
Singles:							
Voltage Accuracy			±4.00%	Vout	Full Load		
Load Regulation			±10.0%	Vout	20% to 100%		
Line Regulation			±1.50%	Vout	LL to HL		
Duals:							
Voltage Accuracy			±4.00%	Vout	Full Load		
+Vout			±4.00%	Vout	Full Load		
-Vout							
Load Regulation							
+Vout			±10.0%	Vout	20% to 100%		
-Vout			±10.0%	Vout	20% to 100%		
Line Regulation			±1.50%	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.



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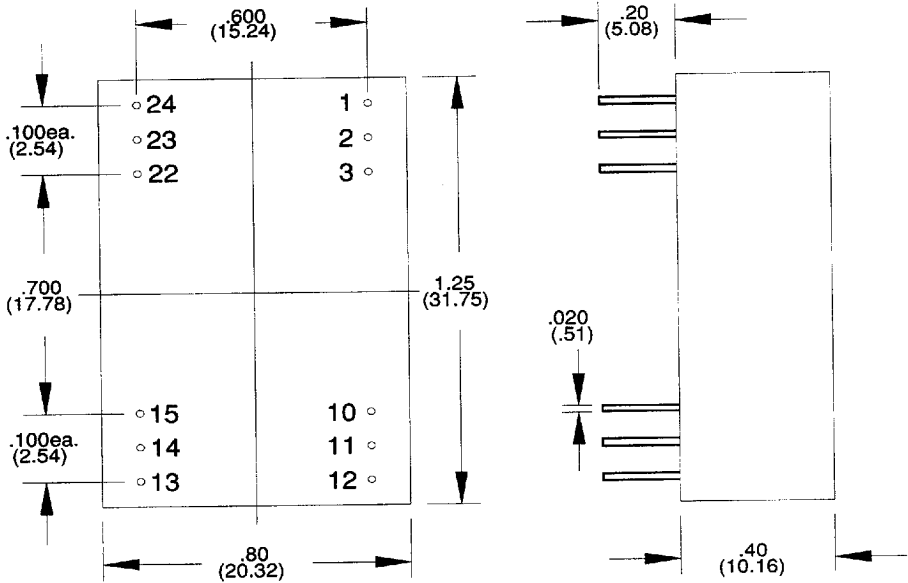
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PIN #	SINGLE	DUAL	DUAL "B"
1 & 24	+Vin	+Vin / -Vin	+Vin
2 & 23	No Connect	+Vin / -Vin	-Vout
3 & 22	No Connect	+Vin / -Vin	Com
4 & 21	No Pin	No Pin	No Pin
5 & 20	No Pin	No Pin	No Pin
6 & 19	No Pin	No Pin	No Pin
7 & 18	No Pin	No Pin	No Pin
8 & 17	No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

BOTTOM VIEW

Mechanical tolerances are ± 0.04 "



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All dimensions are in inches (MM)



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