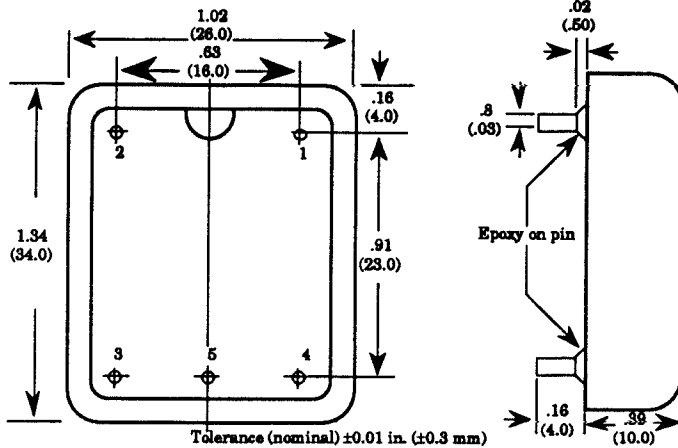


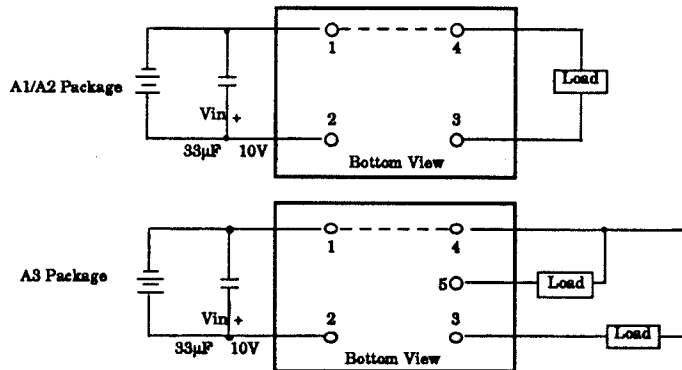
AD1 SERIES

DC-DC CONVERTERS

PACKAGE DIMENSION



STANDARD CONNECTION



PIN ASSIGNMENT

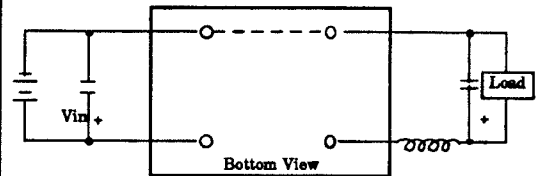
A1 Package	1. -Vin (Common)	A3 Package	1. -Vin (Common)
	2. +Vin		2. +Vin
	3. +Vo		3. -Vo
	4. -Vo (Common)		4. Vo (Common)
A2 Package	1. -Vin (Common)		5. +Vo
	2. +Vin		
	3. -Vo		
	4. +Vo (Common)		

A wide range of low cost DC-DC converters with outputs up to 1000 mW are available for different applications. These converters provide high reliability operation and single positive, negative or dual outputs are available.

FEATURES

- Input Voltage (V_{in}) = +5V ±20%
- Low Cost
- High Efficiency
- Excellent regulation with regard to input and load variation
- Internal filter capacitor
- Small size and epoxy encapsulated in polycarbonate box

CONNECTION WITH CHOKE COIL



NOTES

1. Capacitor voltage rating and polarity to match converter output.
2. Schematic shown for single output. For dual output, same circuit connected to each output.
3. With a 33 µF or 47 µF filter capacitor, a guide to the choke inductance may be found from the empirical formula

$$L(\mu H) = 0.85 \left(\frac{500}{V_{rip}} - 1 \right)$$

Where V_{rip} = desired max. ripple voltage in mVp-p. Choke resistance is sized for load current.

Astec USA (HK) Limited
2880 San Tomas Expressway, Suite 200
Santa Clara, CA 95051 U.S.A.
(408) 748-1200
Telex: 6839191 ASTEC UW
FAX: (408) 727-8281
Toll Free: (800) 7ASTEC7

Eastern Regional Sales Office
One Corporate Place 93,
Suite 110, Burrill Road
Andover, MA 01810
(508) 475-6177
Telex: 4979466 ASTEC
FAX: (508) 475-3220

Central Regional Sales Office
222 W. Las Colinas Blvd., Suite 1650
Irving, Texas 75039
(214) 401-4136
FAX: (214) 401-4085



TYPE	PKG.	VOLTS	REG.(%)	OUTPUT CURRENT (mA)		EFF.(%)	TEMP. COEF.(%/°C)	REGULATION		RIPPLE (mVp-p)
				MIN.	MAX.			LINE(%)	LOAD(%)	
AD1P12A10	A1	+12	±3	25	84	75	0.05	0.8	1.0	500
AD1P15A10	A1	+15	±3	20	68	75	0.05	0.8	1.0	500
AD1N05A10	A2	-5	±3	60	200	65	0.08	0.8	1.0	500
AD1N12A10	A2	-12	±3	25	84	75	0.08	0.8	1.0	500
AD1N15A10	A2	-15	±3	20	68	75	0.08	0.8	1.0	500
AD1P26A05	A2	+26	±3	6	19	75	0.08	0.8	1.0	500
AD1D12A10	A3	±12	±4	12	42	75	0.08	0.8	1.5	500
AD1D15A10	A3	±15	±4	10	34	75	0.08	0.8	1.5	500

NOTES:

1. All output voltages are measured with respect to - Vin (common).
2. Regulation: Line (Vin min. to Vin max.) and Load (to max.).
3. Conversion Efficiency is determined at maximum load with +5V input.
4. Operating Temperature : 0°C to +50°C.
5. Additional external filter chokes and capacitors will significantly improve ripple and noise spikes. (See "Connection with Choke Coil" on front page).
6. For a proper regulation on Dual supply, a minimum load must be applied to each output.
7. The AD1N26A05 is rated at 500mW max output.

TYPE NUMBER SYSTEM

