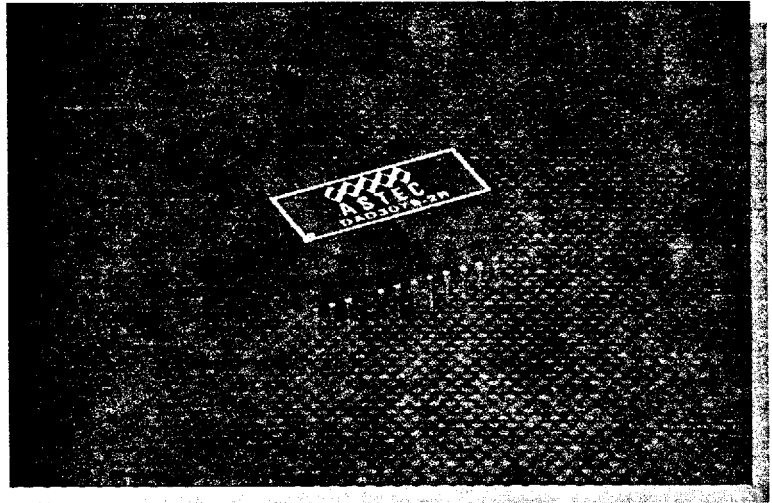


T-57-11

The DA Series is ideal for space critical applications requiring noise immunity, isolation, low reflected ripple, and minimum sizes. Typical applications include telecommunications, instrumentation, computer, auto test equipment, etc.



### Special Features . . .

- 2.25 watts
- 24 pin DIP
- Regulated & unregulated outputs
- Auto-insertable

The DA Series is an economical series of DC/DC converters offering both single and dual outputs, regulated or unregulated. Features include efficiency to 93% and an input Pi filter to reduce reflected ripple. Packaged in a 1.27 x 0.60 x 0.40 plastic case.

### Electrical Specifications . . .

#### Input

V <sub>in</sub> - nominal . . . . .	5, 12, 24, 48 Vdc
Voltage range . . . . .	± 10%
Input filtering . . . . .	Pi filter

#### Output

Voltage tolerance . . . . .	± 3% max
Ripple and noise . . . . .	50 mv P-P
Short circuit protection . . . . .	Unreg: continuous auto recovery Reg: 10 min. max
Temperature coefficient . . . . .	0.02% / °C max

#### General

Regulation:	
Line . . . . .	Unreg: ± 5%; Reg: ± 0.25% max
Load . . . . .	Unreg: ±1% / % V <sub>IN</sub> ; Reg: ±1% max
Efficiency . . . . .	Unreg: 70 - 93%; Reg: 55 - 72%
I/O isolation . . . . .	500 Vdc
Switching frequency . . . . .	20 kHz (typ)

### Environmental . . .

Operating temperature range:  
-25°C to +71°C

Storage temperature:  
-40°C to +85°C

Cooling:  
Free air convection

### Notes . . .

\* Measured with 3.3 µF 25 V tantalum capacitor across each output.

All specifications are typical at nominal line and full load at +25°C unless otherwise noted.

Specifications subject to change without notice. [www.DataSheet4U.com](http://www.DataSheet4U.com)

# DC/DC Converters

www.DataSheet4U.com



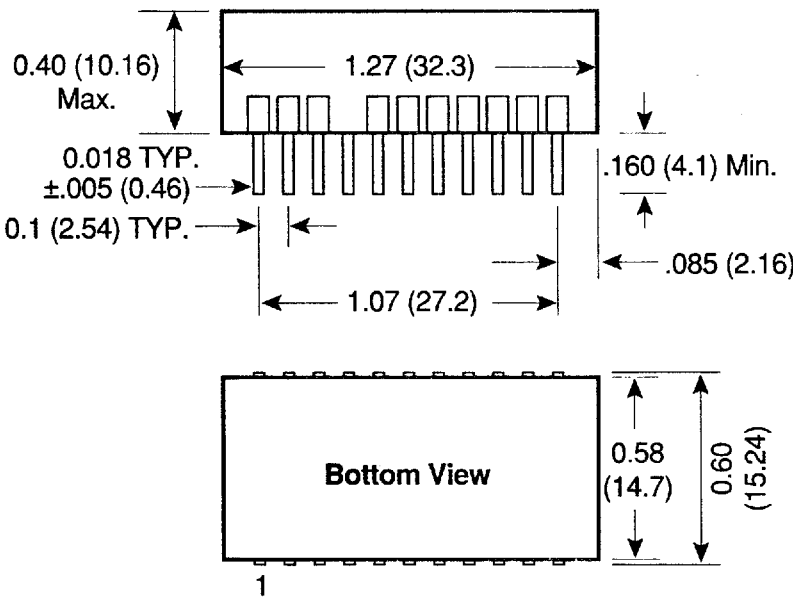
ASTEC STANDARD POWER  
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Telephone: 619-757-1880  
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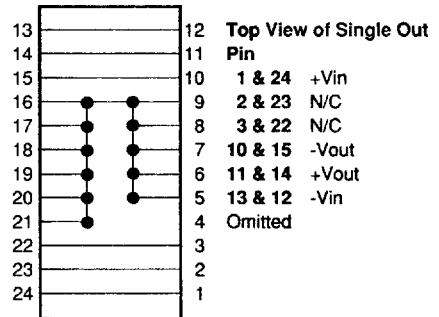
## Ordering Information

	Input Voltage	Output Voltage	Output Current	Model Number	Add Suffix
<b>Single</b>	5 Vdc	5 Vdc	360 mA	DAS2360-2	U (unregulated) or R (regulated)
	5 Vdc	9 Vdc	250 mA	DAS7250-2	U (unregulated) or R (regulated)
	5 Vdc	12 Vdc	150 mA	DAS3150-2	U (unregulated) or R (regulated)
	5 Vdc	15 Vdc	120 mA	DAS4120-2	U (unregulated) or R (regulated)
	12 Vdc	5 Vdc	360 mA	DAS2360-3	U (unregulated) or R (regulated)
	12 Vdc	9 Vdc	200 mA	DAS7250-3	U (unregulated) or R (regulated)
	12 Vdc	12 Vdc	150 mA	DAS3150-3	U (unregulated) or R (regulated)
	12 Vdc	15 Vdc	120 mA	DAS4120-3	U (unregulated) or R (regulated)
	24 Vdc	5 Vdc	360 mA	DAS2360-5	U (unregulated) or R (regulated)
	24 Vdc	9 Vdc	200 mA	DAS7200-5	U (unregulated) or R (regulated)
	24 Vdc	12 Vdc	150 mA	DAS3150-5	U (unregulated) or R (regulated)
	24 Vdc	15 Vdc	120 mA	DAS4120-5	U (unregulated) or R (regulated)
	48 Vdc	5 Vdc	360 mA	DAS2360-1	U (unregulated) or R (regulated)
	48 Vdc	9 Vdc	200 mA	DAS7200-1	U (unregulated) or R (regulated)
	48 Vdc	12 Vdc	150 mA	DAS3150-1	U (unregulated) or R (regulated)
	48 Vdc	15 Vdc	120 mA	DAS4120-1	U (unregulated) or R (regulated)
<b>Dual</b>	5 Vdc	± 5 Vdc	± 180 mA	DAD2360-2	U (unregulated) or R (regulated)
	5 Vdc	± 9 Vdc	± 125 mA	DAD7250-2	U (unregulated) or R (regulated)
	5 Vdc	± 12 Vdc	± 75 mA	DAD3150-2	U (unregulated) or R (regulated)
	5 Vdc	± 15 Vdc	± 60 mA	DAD4120-2	U (unregulated) or R (regulated)
	12 Vdc	± 5 Vdc	± 180 mA	DAD2360-3	U (unregulated) or R (regulated)
	12 Vdc	± 12 Vdc	± 75 mA	DAD3150-3	U (unregulated) or R (regulated)
	12 Vdc	± 15 Vdc	± 60 mA	DAD4120-3	U (unregulated) or R (regulated)
	24 Vdc	± 5 Vdc	± 180 mA	DAD2360-5	U (unregulated) or R (regulated)
	24 Vdc	± 12 Vdc	± 75 mA	DAD3150-5	U (unregulated) or R (regulated)
	24 Vdc	± 15 Vdc	± 60 mA	DAD4120-5	U (unregulated) or R (regulated)
	48 Vdc	± 5 Vdc	± 180 mA	DAD2360-1	U (unregulated) or R (regulated)
	48 Vdc	± 12 Vdc	± 75 mA	DAD3150-1	U (unregulated) or R (regulated)
	48 Vdc	± 15 Vdc	± 60 mA	DAD4120-1	U (unregulated) or R (regulated)

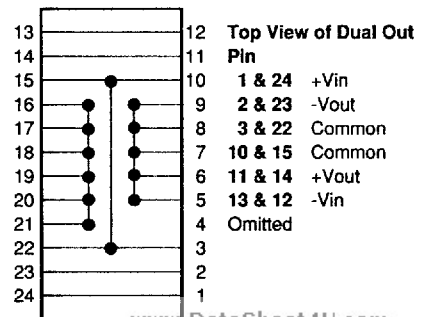
## Drawings



### Single Output



### Dual Output



## Pin Assignments

Single Output	Dual Output
Pin 1 & 24 +Vdc in	Pin 1 & 24 +Vdc in
Pin 2 & 23 NC	Pin 2 & 23 -Vdc out
Pin 3 & 22 NC	Pin 3 & 22 C. out
Pin 10 & 15 -Vdc out	Pin 10 & 15 C. out
Pin 11 & 14 +Vdc out	Pin 11 & 14 +Vdc out
Pin 12 & 13 -Vdc in	Pin 12 & 13 -Vdc in

### Notes

- All dimensions are in inches and (mm).
- Twenty-three pins 0.018 (0.5) square x 0.15 (3.8) Lg Min.