

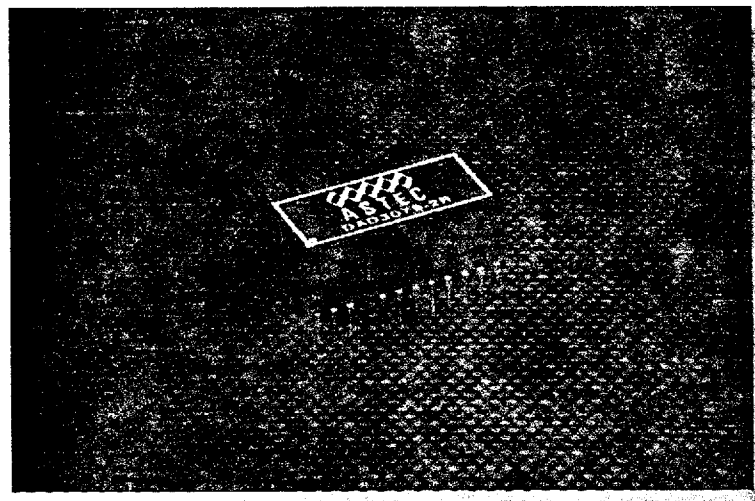
DC/DC Converters

DA Series
2.25 Watts
Single/Dual Outputs



Available
Through
Distribution

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

Vin - 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% / % VIN; 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.

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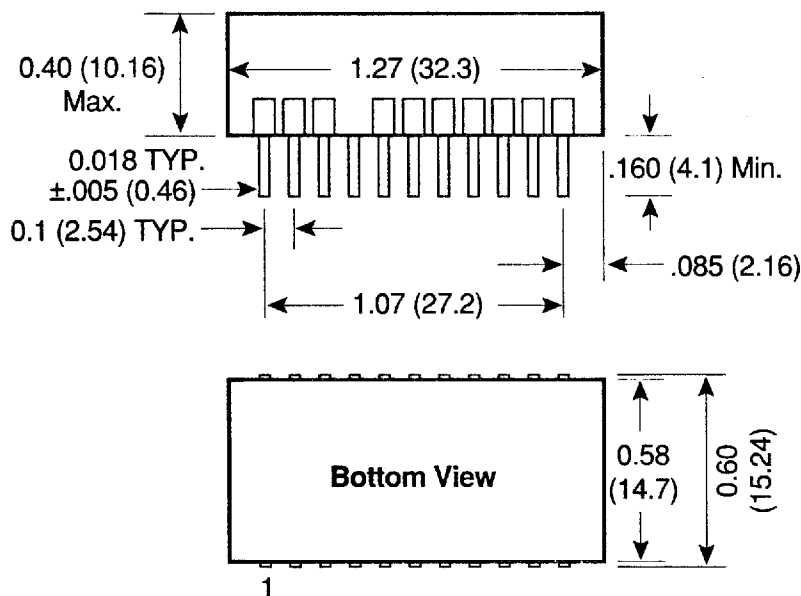
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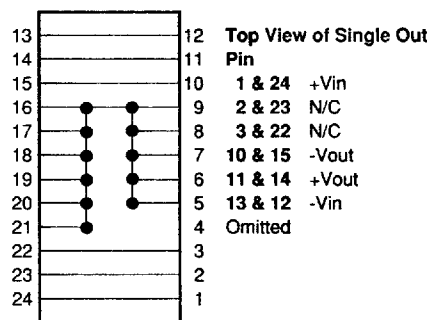
Ordering Information

	Input Voltage	Output Voltage	Output Current	Model Number	Add Suffix
Single	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)
Dual	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)

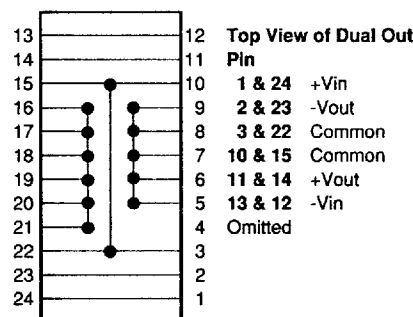
Drawings



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.