



**SEMICONDUCTOR
CIRCUITS, INC.**
49 RANGE RD., WINDHAM, N.H. 03087

SUBSIDIARY OF ASTEC AMERICA, INC.

A SERIES

SINGLE & DUAL OUTPUTS
UP TO 10 WATTS
DC/DC CONVERTERS

The A series DC/DC converters accept a wide input voltage range of 9-18 Vdc, 18-36 Vdc, or 36-72 Vdc. The Series used advanced circuit design and packaging technology to realize superior reliability and performance. An internal Pi filter is used to reduce the magnitude of the reflected current.

- EFFICIENCY TO 85 %
- 2:1 INPUT RANGE
- SIX -SIDED SHIELDING
- 2 YEAR WARRANTY
- ISOLATED
- U.L. APPROVAL PENDING

ENVIRONMENTAL

OPERATING TEMPERATURE
AMBIENT -40°C to +85°C
BASEPLATE 90°C max

STORAGE TEMPERATURE
-40° C to +125° C

HUMIDITY (NON-CONDENSING)
5% to 95%

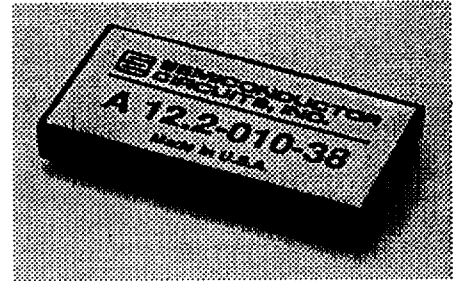
ELECTRICAL SPECIFICATIONS

INPUT RANGES 9-18 VDC
 18-36VDC
 36-72VDC

EFFICIENCY FL to 85%

INPUT RIPPLE CURRENT
 <100mA p-p

PRELIMINARY



OUTPUT

VOLTAGE TOLERANCE
± 1.0 % max

VOLTAGE BALANCE (DUALS)
± 2.0 % max

LINE REGULATION
LL-FL ± .5% max

LOAD REGULATION
NL-FL ± 1% max
*Load regulation (duals)
assumes a balanced load.

RIPPLE/ NOISE 1% p-p
BANDWIDTH 20MHz

TEMPERATURE

COEFFICIENT ± .02%/°Cmax

SHORT CIRCUIT
PROTECTION-CONTINUOUS

OVERVOLTAGE
PROTECTION-ALL SINGLES
POSITIVE OUTPUT ON DUALS

TRANSIENT RESPONSE
500 µsec 50% Step load change

GENERAL SPECIFICATIONS

ISOLATION 500VDC MIN

ISOLATION RESISTANCE
1 X 10⁹ Ohm

SWITCHING FREQUENCY
400 KHz TYP

EMI/RFI - SIX-SIDED
CONTINUOUS SHIELD
DESIGNED TO MEET
FCC CLASS A

INPUT VOLTAGE	OUTPUT 1 VOLTAGE	OUTPUT 2 VOLTAGE	OUTPUT 3 VOLTAGE	MAXIMUM POWER	MODEL NUMBER
9-18	5V @ 2.0 A			10 W	A11-200-18
9-18	12V @ .83A			10 W	A12-083-18
9-18	15V @ .67A			10 W	A13-067-18
9-18		5V @ .75A	-5V @ .75A	7.5 W	A21-150-18
9-18		12V @ .375A	-12V @ .375A	9 W	A22-075-18
9-18		15V @ .300A	-15V @ .300A	9 W	A23-060-18
18-36	5V @ 2.0A			10 W	A11-200-36
18-36	12V @ .83A			10 W	A12-083-36
18-36	15V @ .67A			10 W	A13-067-36
18-36		5V @ .75A	-5V @ .75A	7.5 W	A21-150-36
18-36		12V @ .375A	-12V @ .375A	9 W	A22-075-36
18-36		15V @ .300A	-15V @ .300A	9 W	A23-060-36
36-72	5V @ 2.0A			10 W	A11-200-48
36-72	12V @ .83A			10 W	A12-083-48
36-72	15V @ .67A			10 W	A13-067-48
36-72		5V @ .75A	-5V @ .75A	7.5 W	A21-150-48
36-72		12V @ .375A	-12V @ .375A	9 W	A22-075-48
36-72		15V @ .300A	-15V @ .300A	9 W	A23-060-48

1. + V in
2. - V out
3. + V out
4. No Pin / Common
5. - V out

All specifications subject to change without notice. Mechanical drawings are for reference only.

CASE MATERIAL
ALL METAL

Technical drawing of a rectangular plate with four holes. The plate has a width of .40 and a height of .15. The holes are spaced .04 apart. The text "DIA. TYP." is present.

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