

ASTRODYNE *MicroBrick* Isolated and Regulated 15 WATT Modular DC/DC Converters

- Wide 4 : 1 Input Range
- High Efficiency
- Regulated Outputs
- 1500V Isolation
- Full EMI Shielding
- Standard Pinouts

ASD15 Series



Unit measures 1.6"W x 2"L x 0.315"H

MODEL SELECTIONS

Output Voltage	Output Amps	Input Range	Model Number	Price 1	Price 25
SINGLE OUTPUT					
3.3 VDC	3.75	9-18VDC	ASD15-12S3	\$72	\$69
	3.75	20-75VDC	ASD15-48S3	\$72	\$69
5 VDC	3	9-18VDC	ASD15-12S5	\$72	\$69
	3	20-75VDC	ASD15-48S5	\$72	\$69
12 VDC	1.25	9-18VDC	ASD15-12S12	\$72	\$69
	1.25	20-75VDC	ASD15-48S12	\$72	\$69
15 VDC	1	9-18VDC	ASD15-12S15	\$72	\$69
	1	20-75VDC	ASD15-48S15	\$72	\$69
DUAL OUTPUT					
+/-5 VDC	+/-1.5	9-18VDC	ASD15-12D5	\$78	\$74
	+/-1.5	20-75VDC	ASD15-48D5	\$78	\$74
+/-12 VDC	+/-0.62	9-18VDC	ASD15-12D12	\$78	\$74
	+/-0.62	20-75VDC	ASD15-48D12	\$78	\$74
+/-15 VDC	+/-0.5	9-18VDC	ASD15-12D15	\$78	\$74
	+/-0.5	20-75VDC	ASD15-48D15	\$78	\$74

**Contact
Factory
for
High Volume
Pricing**

All specifications are typical at nominal input, full load, and 25DegC unless otherwise noted

INPUT SPECIFICATIONS

Input Voltage, Nominal	12VDC 48VDC
Input Voltage Ranges	9-18 20-75 VDC
Input Surge Voltage	50V (12V Models), * 100V (48V Models), * 10 mS duration, min.

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Load Regulation	singles: +/- 0.5%
20% - FL	duals: +/-1%, +/-3% (5V mod)
Line Regulation	singles: +/- 0.5%
	duals: +/- 1%
Trim Range	0.5V min, 0.65V typ
Temperature Coefficient	+/-0.01%/DegC
Ripple/Noise(Single/Dual)	100mV Pk-Pk, typ
Overvoltage Protection	Clamp, 130-150% *
Voltage Stability	+/- 0.05%, max
Transient Response	+/- 2%, max
Short Circuit Protection	Continuous, self-recovering

GENERAL SPECIFICATIONS

On/Off Control	(Ref to - Input pin) Logic "1"/Open=ON Logic "0"/GND=OFF
Shutdown Idle Current	15mA
Input-Out Isolation	1500VDC (48V) 500 VDC (12V)
In/Out Capacitance	1000 pF
Efficiency	82%, typ
Switching Frequency	450Khz

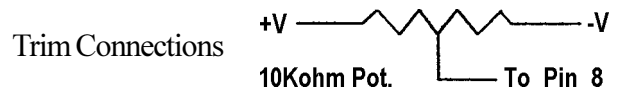
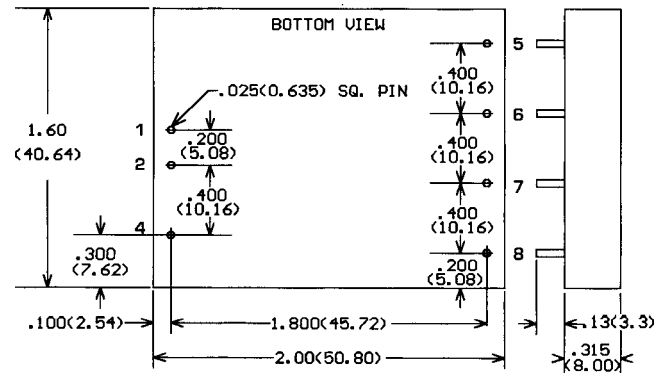
ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +71 DegC(FL)
Storage Temperature	-40 to +125 DegC *
Maximum Case Temp	110 DegC *
Input Fusing	12V: 4A, 48V: 2A
MTBF	1,000,000 Hrs Mil Std 217, 25C
Shock/Vibration	To MIL-STD 810C

PHYSICAL SPECIFICATIONS

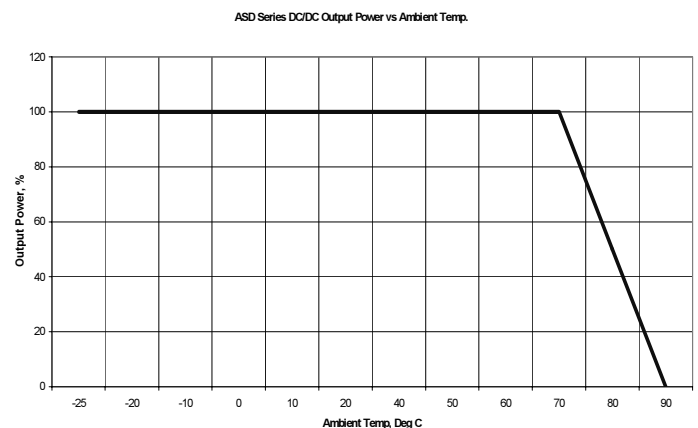
Case Material	Aluminum
Construction	Fully Encapsulated
Weight	1.6 oz, (40g)

MECHANICAL DIMENSIONS



Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	- Input	- Input
3	No Pin	No Pin
4	Control	Control
5	No Pin	+ Output
6	+ Output	Out. Ret.
7	Out. Ret.	- Output
8	Trim	Trim

OUTPUT DERATING CURVE



Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.