

## Isolated and Regulated 5-6 WATT Modular DC/DC Converters

## ASD06 series



Unit measures 0.8"W x 1.25"L x 0.5"H

- 24-Pin DIP Package
- Wide 2:1 Input Range
- 1500V Isolation
- Short Circuit Protection
- High Efficiency
- Input PI Filter



Model Number	Output Voltage	Output mAmps	Input Range	Efficiency
<b>SINGLE OUTPUT</b>				
ASD06-12S3	3.3 VDC	1000	9-18 VDC	70%
ASD06-24S3		1000	18-36 VDC	70%
ASD06-48S3		1000	36-72 VDC	70%
ASD06-12S5	5 VDC	1000	9-18 VDC	76%
ASD06-24S5		1000	18-36 VDC	78%
ASD06-48S5		1000	36-72 VDC	78%
ASD06-12S12	12 VDC	470	9-18 VDC	80%
ASD06-24S12		470	18-36 VDC	82%
ASD06-48S12		470	36-72 VDC	81%
ASD06-12S15	15 VDC	400	9-18 VDC	80%
ASD06-24S15		400	18-36 VDC	82%
ASD06-48S15		400	36-72 VDC	81%
<b>DUAL OUTPUT</b>				
ASD06-12D5	+/-5 VDC	+/-500	9-18 VDC	76%
ASD06-24D5		+/-500	18-36 VDC	78%
ASD06-48D5		+/-500	36-72 VDC	78%
ASD06-12D12	+/-12 VDC	+/-230	9-18 VDC	80%
ASD06-24D12		+/-230	18-36 VDC	81%
ASD06-48D12		+/-230	36-72 VDC	81%
ASD06-12D15	+/-15 VDC	+/-190	9-18 VDC	80%
ASD06-24D15		+/-190	18-36 VDC	81%
ASD06-48D15		+/-190	36-72 VDC	81%

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### INPUT SPECIFICATIONS

Input Voltage Ranges:	12 VDC Nominal	9-18 VDC
	24 VDC Nominal	18-36 VDC
	48 VDC Nominal	36-72 VDC
Input Filter	PI Type	

### OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart	
Load Regulation	Single (10% to FL)	+/- 0.5%
	Dual (25% to FL)	+/-1%
Line Regulation (HL-LL)	+/- 0.5%	
Temperature Coefficient	+/-0.05%/°C	
Ripple/Noise (Single/Dual)	3.3V/5V	100mVp-p max.
	12V/15V	1% p-p max.
Voltage Accuracy	+/- 2%	
Voltage Balance (Dual)	+/-1%	
Short Circuit Protection	Continuous	
Efficiency	See Selection Chart	

### GENERAL SPECIFICATIONS

Input-Output Isolation	1500VDC
Isolation Resistance	10-9nth Ohm min.
Switching Frequency	100Khz
Conducted EMI	Meets EN55022 Class B
Safety	UL60950

### ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +71°C	
Case Temperature	100°C max.	
Storage Temperature	-40 to +100°C *	
Cooling	Free Air Convection	
MTBF	Single O/P	1,186,000 Hrs.
	Dual O/P	1,145,000 Hrs.
	MIL-HDBK-217F	
	Ground Benign, 25°C	

### PHYSICAL SPECIFICATIONS

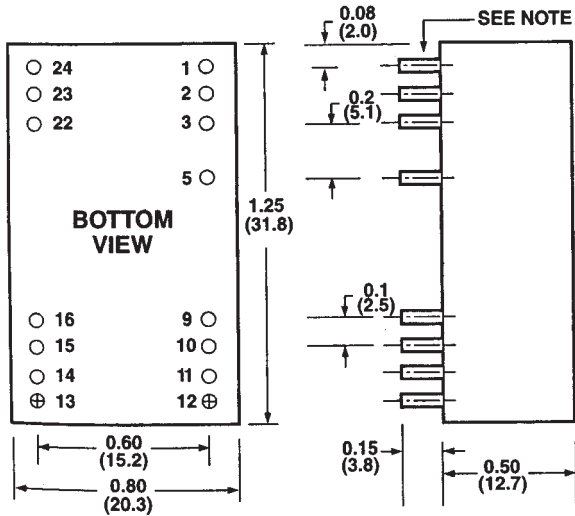
Case Material	Black coated Copper
	w. Non-conductive base
Construction	Fully Encapsulated
Weight	0.5 oz, (13g)
Dimensions	1.25" x 0.8" x 0.5"

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

\* 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.

**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.**

### MECHANICAL DIMENSIONS



NOTE: Pin Size is 0.02" Inch (0.5mm) DIA  
 All Dimensions In Inches (mm)  
 Tolerance .xx = +/-0.02, .xxx = +/- 0.010

Pin #	Single Outputs	Dual Outputs
1	No Pin	No Pin
2	- Input	- Input
3	- Input	- Input
5	No Pin	No Pin
9	NC	Common
10	NC	NC
11	NC	- Output
12	No Pin	No Pin
13	No Pin	No Pin
14	+ Output	+ Output
15	NC	NC
16	- Output	Common
22	+ Input	+ Input
23	+ Input	+ Input
24	No Pin	No Pin