ASTRODYNE

Isolated and Regulated 10 WATT Modular DC/DC Converter

ASD10 series



Unit measures 1"W x 2"L x 0.25"H

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

Model Number	Output Voltage	Output Amps	Input Range
SINGLE OUTPUT			
ASD10-12S3	3.3 VDC	2.5	9-36VDC
ASD10-48S3		2.5	18-75VDC
ASD10-12S5	5 VDC	2	9-36VDC
ASD10-48S5		2	18-75VDC
ASD10-12S9	9 VDC	1.1	9-36VDC
ASD10-48S9		1.1	18-75VDC
ASD10-12S12	12 VDC	0.83	9-36VDC
ASD10-48S12		0.83	18-75VDC
ASD10-12S15	15 VDC	0.67	9-36VDC
ASD10-48S15		0.67	18-75VDC
DUAL OUTPUT			
ASD10-12D5	+/-5 VDC	+/-1	9-36VDC
ASD10-48D5		+/-1	18-75VDC
ASD10-12D12	+/-12 VDC	+/-0.42	9-36VDC
ASD10-48D12		+/-0.42	18-75VDC
ASD10-12D15	+/-15 VDC	+/-0.33	9-36VDC
ASD10-48D15		+/-0.33	18-75VDC

300 Myles Standish Blvd., Taunton, MA 02780
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INPUT SPECIFICATIONS

Input Voltage, Nominal	12VDC	48VDC
Input Voltage Ranges	9-36	18-75 VDC
Input Surge Voltage	50V (12V Models), *	
	100V (48V Models), *	
	10 mS duration, min.	

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Preset Accuracy	Singles: +/- 1% max.
	Duals: +/- 2% max.
Cross Regulation (Duals)	5-8% typ.
Load Regulation	singles: +/- 0.5%
20% - FL	duals: +/-1%, +/-3% (5V mod)
Line Regulation	singles: +/- 0.5%
	duals: +/- 1%
Temperature Coefficient	+/-0.03%/°C
Ripple/Noise (Pk-Pk, typ)	
Single 3V	150mV
Single 5V	100mV (12Vin), 150mV (48Vin)
Single 9,12V	50mV (12Vin), 100mV (48Vin)
Single 15V	50mV
Dual 5V	150mV
Dual 12, 15V	50mV
Overvoltage Protection	Clamp, 130-150% *
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°C(FL)
Storage Temperature	-40 to +125°C *
Maximum Case Temp	110°C *
Input Fusing	12V: 4A, 48V: 2A
MTBF	1,000,000 Hrs
	Mil Std 217, 25°C
Shock/Vibration	To MIL-STD 810°C

PHYSICAL SPECIFICATIONS

Case Material	Aluminum
Construction	Fully Encapsulated
Weight	0.64 oz, (18g)

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

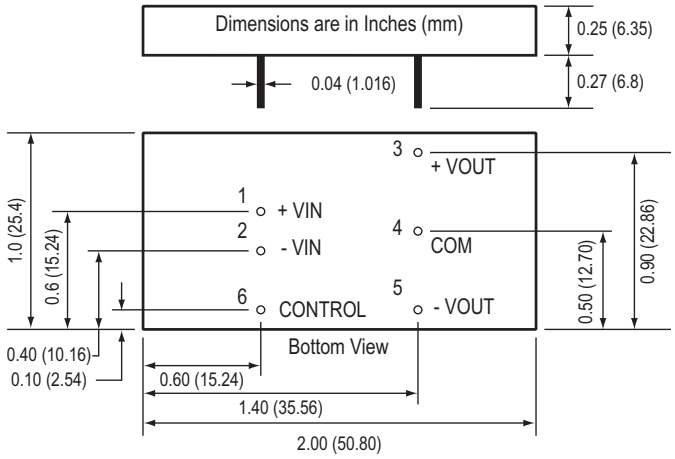
* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranteed nor implied.

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

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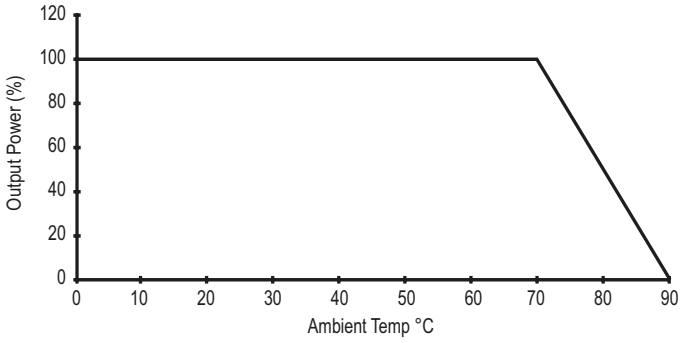
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MECHANICAL DIMENSIONS



Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	- Input	- Input
3	+ Output	+ Output
4	N/A	Common
5	- Output	- Output
6	Control	Control

OUTPUT DERATING CURVE



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