Astrodyne

Isolated and Regulated 7.5 WATT Modular DC/DC Converters

ASD705 series

Unit measures 1"W x 2"L x 0.4"H

- Industry Standard 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
SINGLE OUTPUT				
ASD705-12S3	3.3 VDC	1500	9-18 VDC	74%
ASD705-24S3		1500	18-36 VDC	76%
ASD705-48S3		1500	36-72 VDC	76%
ASD705-12S5	5 VDC	1500	9-18 VDC	76%
ASD705-24S5		1500	18-36 VDC	78%
ASD705-48S5		1500	36-72 VDC	78%
ASD705-12S12	12 VDC	625	9-18 VDC	80%
ASD705-24S12		625	18-36 VDC	82%
ASD705-48S12		625	36-72 VDC	81%
ASD705-12S15	15 VDC	500	9-18 VDC	80%
ASD705-24S15		500	18-36 VDC	82%
ASD705-48S15		500	36-72 VDC	81%
DUAL OUTPUT				
ASD705-12D5	+/-5 VDC	+/-750	9-18 VDC	76%
ASD705-24D5		+/-750	18-36 VDC	78%
ASD705-48D5		+/-750	36-72 VDC	78%
ASD705-12D12	+/-12 VDC	+/-310	9-18 VDC	80%
ASD705-24D12		+/-310	18-36 VDC	81%
ASD705-48D12		+/-310	36-72 VDC	81%
ASD705-12D15	+/-15 VDC	+/-250	9-18 VDC	80%
ASD705-24D15		+/-250	18-36 VDC	81%
ASD705-48D15		+/-250	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

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	1,222,000 Hrs.
Dual O/P	1,148,000 Hrs.
	MIL-HDBK-217F
	Ground Benign, 25°C

PHYSICAL SPECIFICATIONS

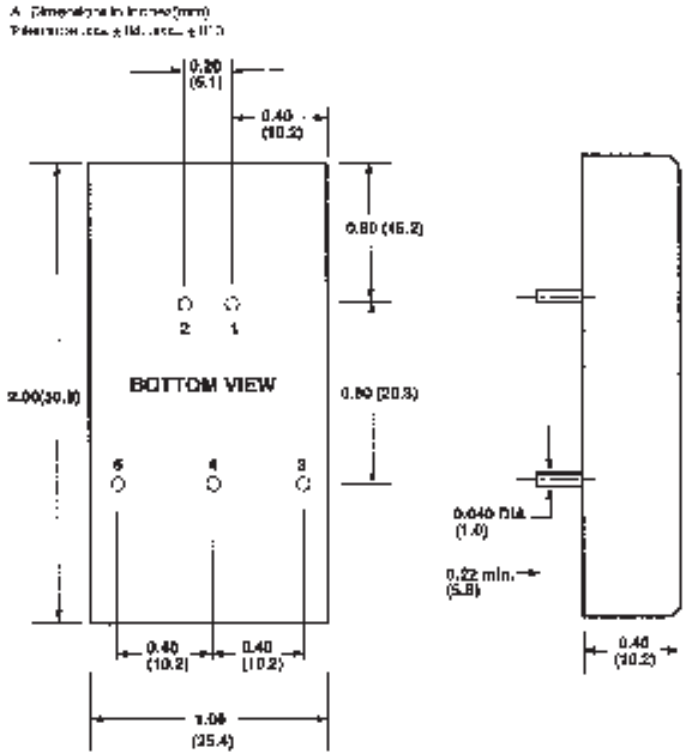
Case Material	Black coated Copper
	w. Non-conductive base
Construction	Fully Encapsulated
Weight	1 oz, (27g)
Dimensions	2" x 1" x 0.4"

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.

MECHANICAL DIMENSIONS



Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	- Input	- Input
3	+ Output	+ Output
4	No Pin	Common
5	- Output	- Output

Derating Curve