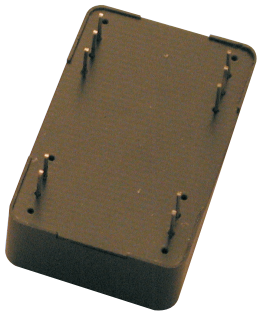
ASTRODYNE

Isolated and Regulated 3 WATT Modular DC/DC Converters

ASD03 series



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

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

c UL us
"H" versions only

Model Number	Output Voltage	Output mAmps	Input Range	Efficiency
SINGLE OUTPUT				
ASD03-12S3(H orM)*	3.3 VDC	600	9-18 VDC	70%
ASD03-24S3(H orM)*		600	18-36 VDC	73%
ASD03-48S3(H orM)*		600	36-72 VDC	71%
ASD03-12S5(H or M)*	5 VDC	600	9-18 VDC	73%
ASD03-24S5(H or M)*		600	18-36 VDC	74%
ASD03-48S5(H or M)*		600	36-72 VDC	76%
ASD03-12S12(H or M)*	12 VDC	250	9-18 VDC	78%
ASD03-24S12(H or M)*		250	18-36 VDC	80%
ASD03-48S12(H or M)*		250	36-72 VDC	77%
ASD03-12S15(H or M)*	15 VDC	200	9-18 VDC	76%
ASD03-24S15(H or M)*		200	18-36 VDC	80%
ASD03-48S15(H or M)*		200	36-72 VDC	77%
DUAL OUTPUT				
ASD03-12D5(H or M)*	+/-5 VDC	+/-300	9-18 VDC	73%
ASD03-24D5(H or M)*		+/-300	18-36 VDC	74%
ASD03-48D5(H or M)*		+/-300	36-72 VDC	76%
ASD03-12D12(H or M)*	+/-12 VDC	+/-125	9-18 VDC	76%
ASD03-24D12(H or M)*		+/-125	18-36 VDC	80%
ASD03-48D12(H or M)*		+/-125	36-72 VDC	76%
ASD03-12D15(H or M)*	+/-15 VDC	+/-100	9-18 VDC	75%
ASD03-24D15(H or M)*		+/-100	18-36 VDC	78%
ASD03-48D15(H or M)*		+/-100	36-72 VDC	76%

* Specifying "H" or "M" designates a choice of Pinouts (Please see Mechanical Specifications) and a choice of 500VDC Isolation ("M" Version) or 1500VDC Isolation ("H" Version).

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Ph: 1-800-823-8082 Fax: 508-823-8181

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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%	
Short Circuit Protection	Continuous	
Voltage Balance (Dual)	+/-1%	
Efficiency	See Selection Chart	

GENERAL SPECIFICATIONS

Input-Output Isolation	500VDC (“M” Versions)
	1500VDC (“H” Versions)
Isolation Resistance	10-9nth Ohm min.
Switching Frequency	100Khz
Conducted EMI	Meets EN55022 Class B
Safety	UL, cUL - “H” Versions Only

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	1,203,000 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 25DegC 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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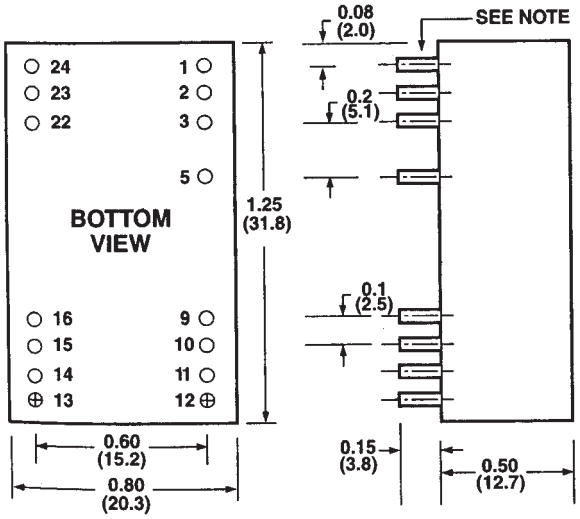
MECHANICAL DIMENSIONS



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

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

NC = No Connection with Pin

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