ASTRODYNE

Isolated and Regulated 20 WATT Modular DC/DC Converter

ASD20 series



Unit measures 1.6"W x 2"L x 0.45"H

- Wide 4:1 Input Range
- 1500V Isolation
- Short Circuit Protection
- Remote On/Off Control
- High Efficiency
- Input PI Filter

c UL us

Model Number	Output Voltage	Output Amps	Input Range	Efficiency
SINGLE OUTPUT				
ASD20-12S3	3.3 VDC	4	9-36 VDC	78.00%
ASD20-48S3		4	18-72 VDC	78.00%
ASD20-12S5	5 VDC	4	9-36 VDC	81.00%
ASD20-48S5		4	18-72 VDC	82.00%
ASD20-12S12	12 VDC	1.67	9-36 VDC	83.00%
ASD20-48S12		1.67	18-72 VDC	84.00%
ASD20-12S15	15 VDC	1.33	9-36 VDC	83.00%
ASD20-48S15		1.33	18-72 VDC	84.00%
DUAL OUTPUT				
ASD20-12D5	+/-5 VDC	+/-2.0	9-36 VDC	83.00%
ASD20-48D5		+/-2.0	18-72 VDC	84.00%
ASD20-12D12	+/-12 VDC	+/-833	9-36 VDC	83.00%
ASD20-48D12		+/-833	18-72 VDC	84.00%
ASD20-12D15	+/-15 VDC	+/-666	9-36 VDC	83.00%
ASD20-48D15		+/-666	18-72 VDC	84.00%

300 Myles Standish Blvd., Taunton, MA 02780
Ph: 1-800-823-8082 Fax: 508-823-8181

ASTRODYNE

Isolated and Regulated 20 WATT Modular DC/DC Converter **ASD20 series**

INPUT SPECIFICATIONS

Input Voltage Ranges:	12 VDC Nominal	9-36 VDC
	24 VDC Nominal	18-72 VDC
Input Filter	PI Type	
Remote On/Off Control		
Logic Compatibility	CMOS or Open Collector TTL	
EC-On	>+5.5VDC or Open Circuit	
EC-Off	<1.8VDC	
Control Common	Ref. to - Input	

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart	
Load Regulation (25% to FL)	+/-0.5%	
Line Regulation	(HL-LL)	+/-0.5%
Temperature Coefficient	+/-0.02%/°C	
Ripple/Noise	RMS	20mV max.
	P-P	75mVp-p max.
Voltage Accuracy	Single O/P	+/-1%
	Dual +O/P	+/-1%
	Dual -O/P	+/-2%
Voltage Balance (Dual FL)	+/-1%	
Short Circuit Protection	Continuous	
Efficiency	See Selection Chart	
Transient Response		
Single 25% Load Change		<500uS
Dual Full Load to 1/2 Load		<500uS
Trim	+/-10%	

GENERAL SPECIFICATIONS

Input-Output Isolation	1500VDC
Isolation Resistance	10-8nth Ohm min.
Switching Frequency	300Khz
Safety	UL60950
RFI	Six Sided Shielding
MTBF	MIL-HDBK-217F
	Ground Benign, 25°C
	880,584 Hrs.

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +71°C w. Derate
Derate Above 60°C	Linearly to Zero Power +100°C
Case Temperature	100°C max.
Storage Temperature	-55 to +105°C *

PHYSICAL SPECIFICATIONS

Case Material	Black coated Copper
	w. Non-conductive base
Construction	Fully Encapsulated
Weight	2 oz, (57g)
Dimensions	1.6" x 2" x 0.45"

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

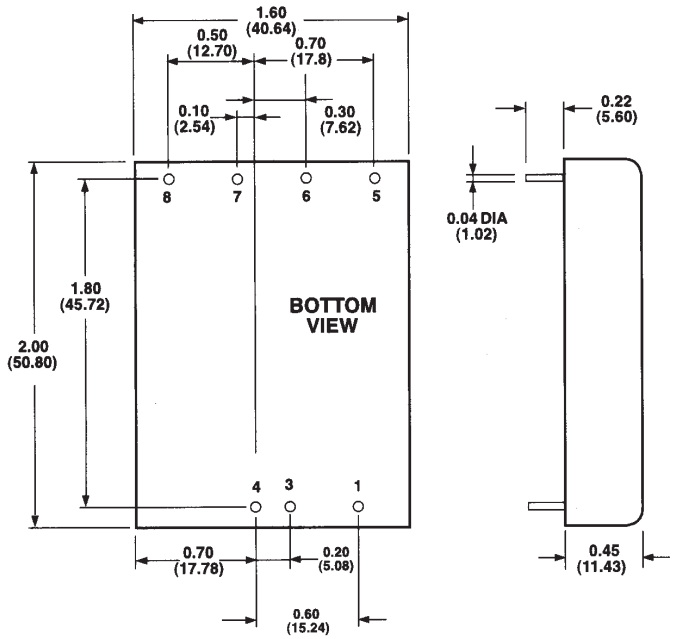
* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranteed nor implied.

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.

WWW.ASTRODYNE.COM

300 Myles Standish Blvd., Taunton, MA 02780
Ph: 1-800-823-8082 Fax: 508-823-8181

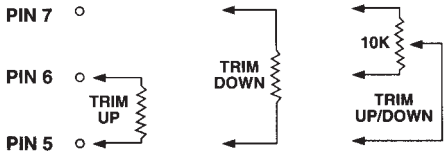
MECHANICAL DIMENSIONS



All Dimensions In Inches (mm)
Tolerance .xx = +/-0.04, .xxx = +/- 0.010

Pin #	Single Outputs	Dual Outputs
1	On/Off Control	On/Off Control
3	- Input	- Input
4	+ Input	+ Input
5	Trim	Trim
6	- Vout	- Vout
7	+ Vout	Common
8	No Pin	+ Vout

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.



300 Myles Standish Blvd., Taunton, MA 02780
Ph: 1-800-823-8082 Fax: 508-823-8181