

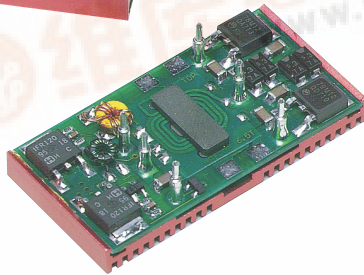
# ASTRODYNE

Isolated and Regulated 5 WATT Open Frame DC/DC Converter

## ASD05H series



Unit measures 1"W x 2"L x 0.375"H



- Wide 4 : 1 Input Range
- High Efficiency
- Regulated Outputs
- 1500V Isolation
- Integral Finned Heatsink
- EN60950 & UL60950-1 Approved



Model Number	Output Voltage	Output Amps	Input Range
--------------	----------------	-------------	-------------

**SINGLE OUTPUT**

ASD05H-12S3	3.3 VDC	1.5	9-36VDC
ASD05H-48S3		1.5	18-75VDC
ASD05H-12S5	5 VDC	1	9-36VDC
ASD05H-48S5		1	18-75VDC
ASD05H-12S9	9 VDC	0.55	9-36VDC
ASD05H-48S9		0.55	18-75VDC
ASD05H-12S12	12 VDC	0.42	9-36VDC
ASD05H-48S12		0.42	18-75VDC
ASD05H-12S15	15 VDC	0.33	9-36VDC
ASD05H-48S15		0.33	18-75VDC

**DUAL OUTPUT**

ASD05H-12D5	+/-5 VDC	+/-0.5	9-36VDC
ASD05H-48D5		+/-0.5	18-75VDC
ASD05H-12D12	+/-12 VDC	+/-0.21	9-36VDC
ASD05H-48D12		+/-0.21	18-75VDC
ASD05H-12D15	+/-15 VDC	+/-0.17	9-36VDC
ASD05H-48D15		+/-0.17	18-75VDC





Isolated and Regulated 5 WATT Open Frame DC/DC Converter

**ASD05H** series

### 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 3.3V	100mV
Single 5, 9,12, 15V	50mV
Dual 5V	150mV (12Vin) 100mV (48Vin)
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)
Relative Humidity	0 to 95%, non-cond
Storage Temperature	-40 to +125°C *
Maximum Heatsink 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
Safety	EN60950 TUV File # B 02 10 22749 038 UL60950-1 UL File # E167432

### PHYSICAL SPECIFICATIONS

Heatsink Material	Aluminum
Construction	Open Frame
Weight	0.57 oz, (16g)

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.

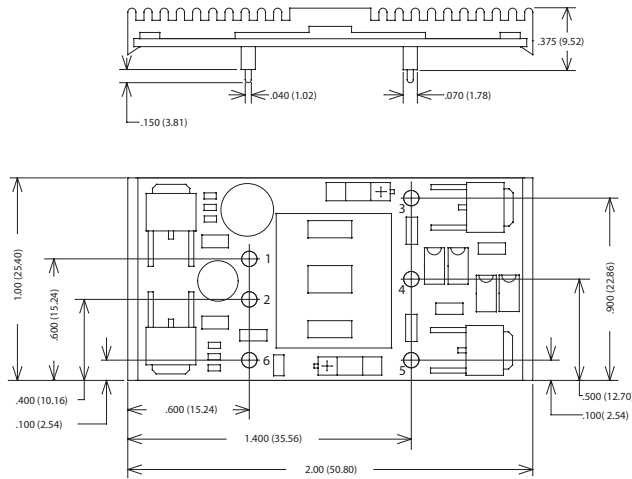
**Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.**



Isolated and Regulated 5 WATT Open Frame DC/DC Converter

**ASD05H** series

**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**

