

Unit measures 2.28"W x 2.4"L x 0.5"H

- Wide 2:1 Input Range
- 1500V Isolation
- Remote ON/OFF Control
- High Efficiency
- Input PI Filter
- Five-Sided Shield



Model Number	Output Voltage	Output Amps	Input Range	Efficiency
ASD50-12S25	2.5 VDC	10	9-18 VDC	76.00%
ASD50-24S25		10	18-36 VDC	77.00%
ASD50-48S25		10	36-75 VDC	77.00%
ASD50-12S3	3.3 VDC	10	9-18 VDC	78.00%
ASD50-24S3		10	18-36 VDC	79.00%
ASD50-48S3		10	36-75 VDC	79.00%
ASD50-12S5	5 VDC	10	9-18 VDC	81.00%
ASD50-24S5		10	18-36 VDC	82.00%
ASD50-48S5		10	36-75 VDC	83.00%
ASD50-12S12	12 VDC	4.16	9-18 VDC	84.00%
ASD50-24S12		4.16	18-36 VDC	85.00%
ASD50-48S12		4.16	36-75 VDC	85.00%
ASD50-12S15	15 VDC	3.33	9-18 VDC	84.00%
ASD50-24S15		3.33	18-36 VDC	85.00%
ASD50-48S15		3.33	36-75 VDC	85.00%
ASD50-12S24	24 VDC	2.08	9-18 VDC	84.00%
ASD50-24S24		2.08	18-36 VDC	86.00%
ASD50-48S24		2.08	36-75 VDC	86.00%



Isolated and Regulated 25 to 50 WATT Modular DC/DC Converters

**ASD50 series**

**INPUT SPECIFICATIONS**

Input Voltage Ranges:	12 VDC Nominal	9-18 VDC
	24 VDC Nominal	18-36 VDC
	48 VDC Nominal	36-75 VDC
Undervoltage Lockout	12Vin Power Up	8.8V
	12Vin Power Down	8V
	24Vin Power Up	17V
	24Vin Power Down	16V
	48Vin Power Up	34V
	48Vin Power Down	32.5V
Input Filter	PI Type	

**OUTPUT SPECIFICATIONS**

Voltage and Current	See Selection Chart	
Load Regulation (0% to FL)	+/-0.2%, max.	
Line Regulation	(HL-LL)	+/-0.2%, max.
Temperature Coefficient	+/-0.03%/°C	
Ripple/Noise	2.5, 3.3 & 5Vout	20mV RMS, max. 75mVp-p max.
	12 & 15Vout	30mV RMS, max. 100mVp-p max.
	24Vout	100mV RMS, max. 240mVp-p max.
Voltage Accuracy	+/-1%, max	
Transient Response	25% Change	<500uS
Trim Adjustment Range	+/-10%	
Short Circuit Protection	Continuous	
Over Voltage Protection	115-140% of Output	
Current Limit	110-150% of Rated Load	
Efficiency	See Selection Chart	

**GENERAL SPECIFICATIONS**

Input-Output Isolation	I/P-O/P, I/P-Case, O/P-Case	1500VDC
	Isolation Resistance	10-7nth Ohm min.
Switching Frequency	12 & 24Vin	400kHz
	48Vin	300kHz
Safety	UL60950	

\* 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.

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**ENVIRONMENTAL SPECIFICATIONS**

Oper. Case Temperature	-40 to +100°C
Thermal Shutdown, Case Temp.	100°C typ.
Storage Temperature	-55 to +105°C *
Cooling	Free Air Convection
MTBF	1,005,677 Hrs.
	MIL-HDBK-217F
	Ground Benign, 25°C

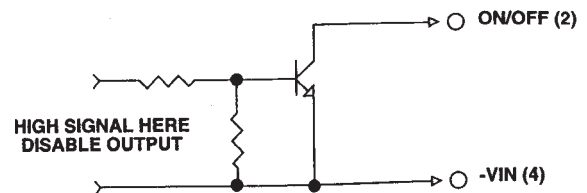
**PHYSICAL SPECIFICATIONS**

Case Material	Aluminum
Construction	Fully Encapsulated
Weight	5 oz (142g)
Dimensions	2.28" x 2.4" x 0.5"

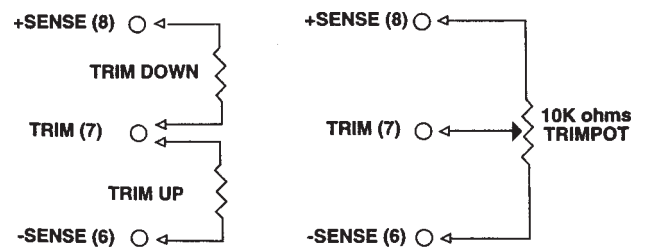
**REMOTE ON/OFF CONTROL**

Logic Compatibility	Open Collector
	Referenced to - Input
Module-On	Open Circuit
Module-Off	<0.8VDC
Shutdown Idle Current	10mA

**Remote ON/OFF Control**



**EXTERNAL OUTPUT TRIMMING**



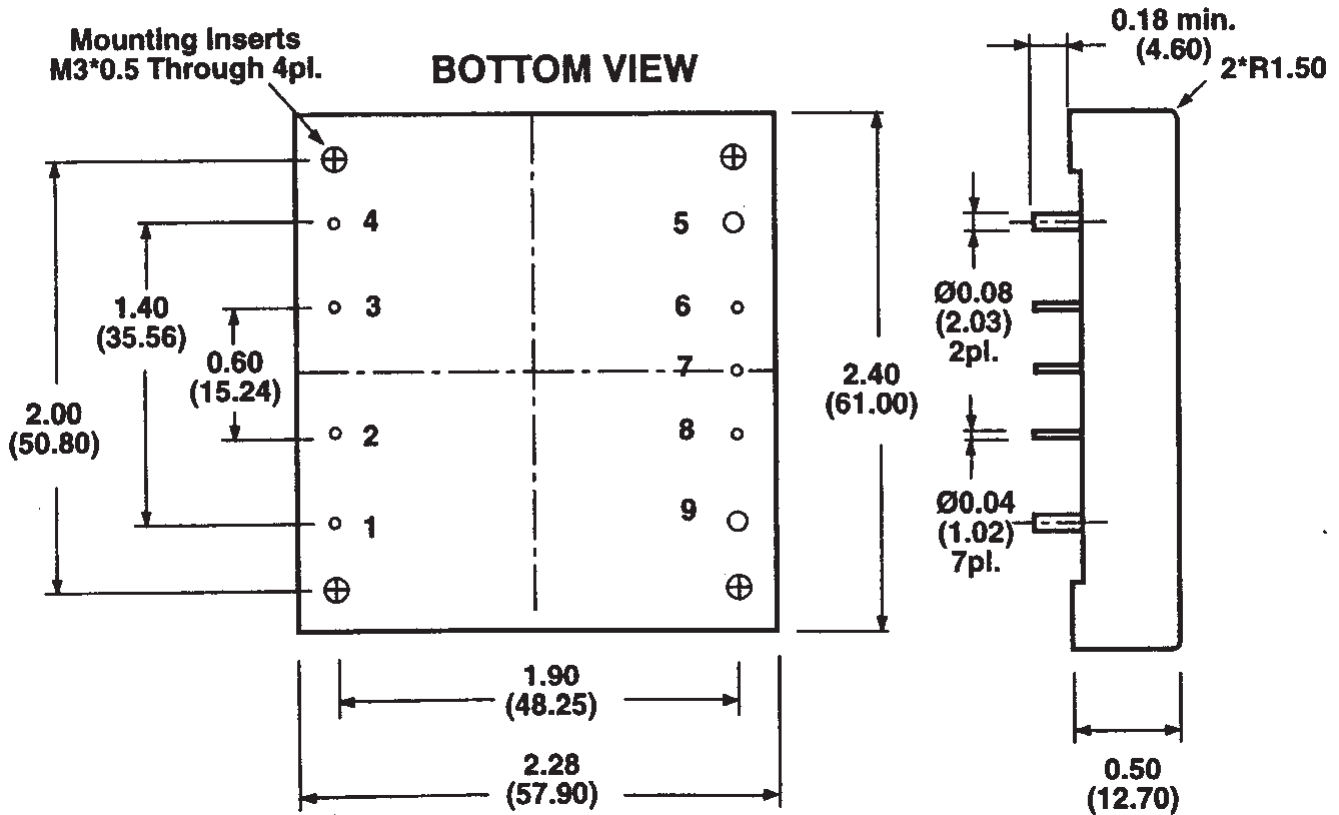
All specifications are typical at nominal input, full load, and 25DegC unless otherwise noted

**ASTRODYNE USA: 1-800-823-8082**  
**ASTRODYNE PACIFIC: 886-2-26983458**

### MECHANICAL DIMENSIONS

All Dimensions In Inches(mm)

Tolerances	Inches	.XX±.02	.XXX±.01	Pin	±0.02
	Millimeters	.X±.5	.XX±.25		±0.5



Pin #	Function
1	+ Input
2	Remote On/Off
3	Case
4	- Input
5	- Output
6	- Sense
7	Trim
8	+ Sense
9	+ Output

*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.*