



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



| 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% |

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

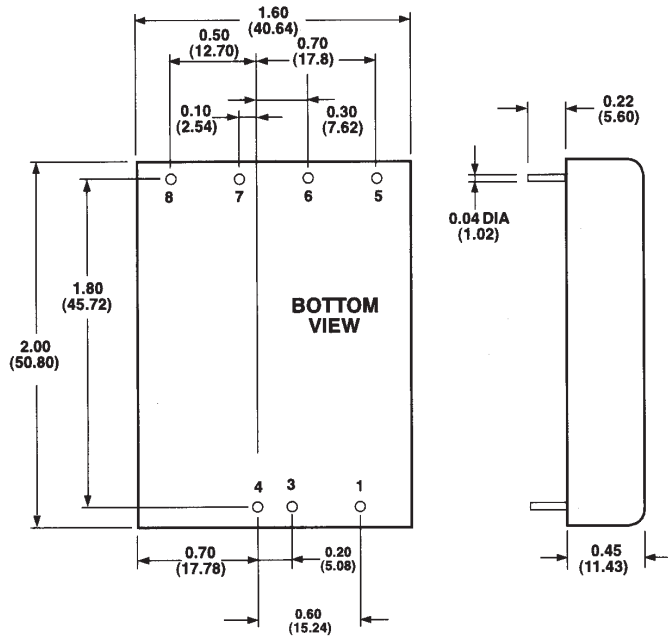
| | |
|---------------|---|
| Case Material | Black coated Copper w. Non-conductive base |
| Construction | Fully Encapsulated |
| Weight | 2 oz, (57g) |
| Dimensions | 1.6" x 2" x 0.45" |

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 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.

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 ($\pm 10\%$) with a fixed resistor or an external trimpot as shown.

