



Unit measures 1"W x 2"L x 0.25"H

- Wide 4 : 1 Input Range
- High Efficiency
- Regulated Outputs
- 1500V Isolation
- Full EMI Shielding
- Standard Pinouts

| Model Number         | Output Voltage | Output Amps | Input Range |
|----------------------|----------------|-------------|-------------|
| <b>SINGLE OUTPUT</b> |                |             |             |
| ASD10-12S3           | 3.3 VDC        | 2.5         | 9-36VDC     |
| ASD10-48S3           |                | 2.5         | 18-75VDC    |
| ASD10-12S5           | 5 VDC          | 2           | 9-36VDC     |
| ASD10-48S5           |                | 2           | 18-75VDC    |
| ASD10-12S9           | 9 VDC          | 1.1         | 9-36VDC     |
| ASD10-48S9           |                | 1.1         | 18-75VDC    |
| ASD10-12S12          | 12 VDC         | 0.83        | 9-36VDC     |
| ASD10-48S12          |                | 0.83        | 18-75VDC    |
| ASD10-12S15          | 15 VDC         | 0.67        | 9-36VDC     |
| ASD10-48S15          |                | 0.67        | 18-75VDC    |
| <b>DUAL OUTPUT</b>   |                |             |             |
| ASD10-12D5           | +/-5 VDC       | +/-1        | 9-36VDC     |
| ASD10-48D5           |                | +/-1        | 18-75VDC    |
| ASD10-12D12          | +/-12 VDC      | +/-0.42     | 9-36VDC     |
| ASD10-48D12          |                | +/-0.42     | 18-75VDC    |
| ASD10-12D15          | +/-15 VDC      | +/-0.33     | 9-36VDC     |
| ASD10-48D15          |                | +/-0.33     | 18-75VDC    |

### 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%/DegC                |
| Ripple/Noise (Pk-Pk, typ) |                              |
| Single 3V                 | 150mV                        |
| Single 5V                 | 100mV (12Vin), 150mV (48Vin) |
| Single 9,12V              | 50mV (12Vin), 100mV (48Vin)  |
| Single 15V                | 50mV                         |
| Dual 5V                   | 150mV                        |
| 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 DegC(FL) |
| Storage Temperature | -40 to +125 DegC *  |
| Maximum Case Temp   | 110 DegC *          |
| Input Fusing        | 12V: 4A, 48V: 2A    |
| MTBF                | 1,000,000 Hrs       |
|                     | Mil Std 217, 25C    |
| Shock/Vibration     | To MIL-STD 810C     |

### PHYSICAL SPECIFICATIONS

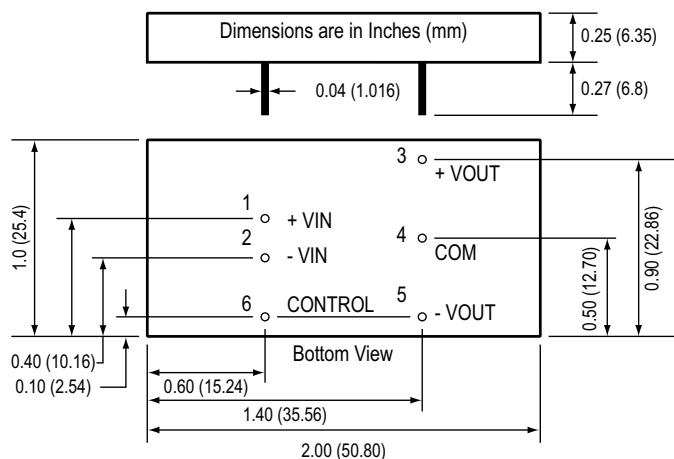
|               |                    |
|---------------|--------------------|
| Case Material | Aluminum           |
| Construction  | Fully Encapsulated |
| Weight        | 0.64 oz, (18g)     |

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 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



| 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

