



Unit measures 2.0"W x 2.0"L x 0.4"H

- Wide 2:1 Input Range
- Remote ON/OFF Control
- High Efficiency
- Input PI Filter
- Six-Sided Shield

| Model Number | Output Voltage | Output mAmps | Input Range | Efficiency |
|----------------------|----------------|--------------|-------------|------------|
| SINGLE OUTPUT | | | | |
| ASD30-12S3 | 3.3 VDC | 5000 | 9-18 VDC | 74% |
| ASD30-24S3 | | 5000 | 18-36 VDC | 75% |
| ASD30-48S3 | | 5000 | 36-72 VDC | 75% |
| ASD30-12S5 | 5 VDC | 5000 | 9-18 VDC | 78% |
| ASD30-24S5 | | 5000 | 18-36 VDC | 79% |
| ASD30-48S5 | | 5000 | 36-72 VDC | 79% |
| ASD30-12S12 | 12 VDC | 2500 | 9-18 VDC | 82% |
| ASD30-24S12 | | 2500 | 18-36 VDC | 82% |
| ASD30-48S12 | | 2500 | 36-72 VDC | 82% |
| ASD30-12S15 | 15 VDC | 2000 | 9-18 VDC | 82% |
| ASD30-24S15 | | 2000 | 18-36 VDC | 82% |
| ASD30-48S15 | | 2000 | 36-72 VDC | 82% |
| DUAL OUTPUT | | | | |
| ASD30-12D5 | +/-5 VDC | +/-2500 | 9-18 VDC | 78% |
| ASD30-24D5 | | +/-2500 | 18-36 VDC | 79% |
| ASD30-48D5 | | +/-2500 | 36-72 VDC | 79% |
| ASD30-12D12 | +/-12 VDC | +/-1250 | 9-18 VDC | 82% |
| ASD30-24D12 | | +/-1250 | 18-36 VDC | 85% |
| ASD30-48D12 | | +/-1250 | 36-72 VDC | 85% |
| ASD30-12D15 | +/-15 VDC | +/-1000 | 9-18 VDC | 82% |
| ASD30-24D15 | | +/-1000 | 18-36 VDC | 85% |
| ASD30-48D15 | | +/-1000 | 36-72 VDC | 85% |
| TRIPLE OUTPUT | | | | |
| ASD30-12T512 | 5, +/-12 VDC | 3500, +/-300 | 9-18 VDC | 79% |
| ASD30-24T512 | | 3500, +/-300 | 18-36 VDC | 80% |
| ASD30-48T512 | | 3500, +/-300 | 36-72 VDC | 85% |
| ASD30-12T515 | 5, +/-15 VDC | 3500, +/-200 | 9-18 VDC | 79% |
| ASD30-24T515 | | 3500, +/-200 | 18-36 VDC | 80% |
| ASD30-48T515 | | 3500, +/-200 | 36-72 VDC | 80% |





Isolated and Regulated 30 WATT Modular DC/DC Converter

ASD30 series

INPUT SPECIFICATIONS

| | | |
|-----------------------|----------------|-----------|
| Input Voltage Ranges: | 12 VDC Nominal | 9-18 VDC |
| | 24 VDC Nominal | 18-36 VDC |
| | 48 VDC Nominal | 36-72 VDC |
| Input Filter | PI Type | |

OUTPUT SPECIFICATIONS

| | | |
|-----------------------------|-------------------------|--------------|
| Voltage and Current | See Selection Chart | |
| Load Regulation (25% to FL) | Single/Dual | +/-0.5% |
| | Triple | +/-1% |
| | Line Regulation (HL-LL) | Single/Dual |
| | Triple | +/-1% |
| | Temperature Coefficient | +/-0.02%/°C |
| Ripple/Noise | 10 mV RMS, max. | |
| | 75mVp-p max. | |
| Voltage Accuracy | Single Ouput | +/-2%, max. |
| | Dual + Output | +/-2%, max. |
| | Dual - Output | +/-3%, max. |
| | Triple 5V | +/- 2%, max. |
| | Triple 12V/15V | +/-5%, max |
| Voltage Balance (Dual) | +/-1% | |
| Transient Response | Single, 25% Change | <500uS |
| | Dual FL to 1/2L | <500uS |
| Trim Adjustment Range | +/-10% | |
| Short Circuit Protection | Continuous | |
| Efficiency | See Selection Chart | |

PHYSICAL SPECIFICATIONS

| | |
|---------------|------------------------|
| Case Material | Black coated Copper |
| | w. Non-conductive base |
| Construction | Fully Encapsulated |
| Weight | 2.4 oz, (68g) |
| Dimensions | 2.0"x2.0"x0.4" |

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.

GENERAL SPECIFICATIONS

| | | |
|------------------------|-----------------------------|--------------|
| Input-Output Isolation | 500VDC | |
| Isolation Resistance | 10-9nth Ohm min. | |
| Switching Frequency | 300Khz | |
| Case Grounding | Connected to O/P Common | |
| Safety | UL60950 | |
| EMI/RFI | Six Sided Continuous Shield | |
| MTBF | Single O/P | 891,000 Hrs. |
| | Dual O/P | 870,000 Hrs. |
| | Triple O/P | 790,000 Hrs. |
| | MIL-HDBK-217F | |
| | Ground Benign, 25°C | |

ENVIRONMENTAL SPECIFICATIONS

| | |
|---------------------|------------------------|
| Oper. Temperature | -25 to +71°C w. Derate |
| | See Curve |
| Case Temperature | 100°C max. |
| Storage Temperature | -55 to +105°C * |
| Cooling | Free Air Convection |

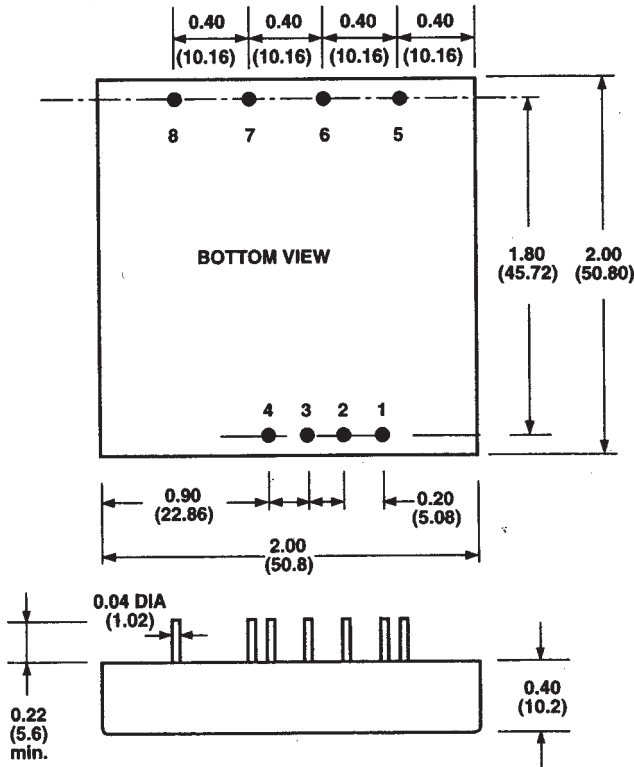
REMOTE ON/OFF CONTROL

| | |
|-----------------------|-----------------------|
| Logic Compatibility | CMOS or Open |
| | Collector TTL |
| EC-On | >+5.5VDC or Open |
| | Circuit |
| EC-Off | <1.8VDC |
| Shutdown Idle Current | 10mA |
| Control Common | Referenced to - Input |

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

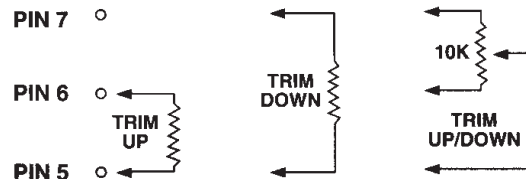
All Dimensions in Inches (mm)
Tolerance .xx= ±.04, .xxx= ±.010



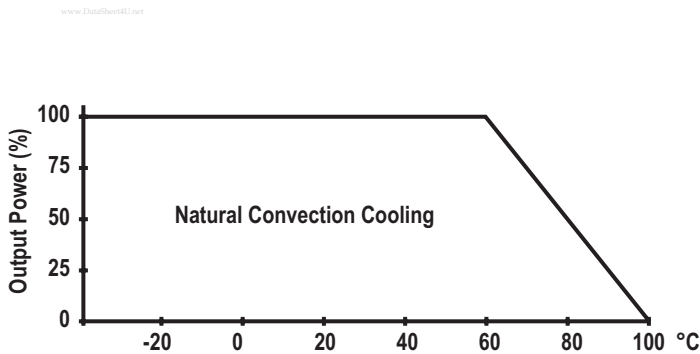
| Pin # | Single Outputs | Dual Outputs | Triple Outputs |
|-------|----------------|---------------|----------------|
| 1 | Remote On/Off | Remote On/Off | Remote On/Off |
| 2 | No Pin | No Pin | No Pin |
| 3 | - Input | - Input | - Input |
| 4 | + Input | + Input | + Input |
| 5 | Trim | Trim | - Aux. Out |
| 6 | - Output | - Output | Common |
| 7 | + Output | Common | + 5Vout |
| 8 | No Pin | + Output | + Aux. Out |

EXTERNAL OUTPUT TRIMMING

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



DERATE CURVE



| Output (Pin No.) | Voltage | Amperes | |
|------------------|------------|---------|------|
| | | Min.(2) | Nom. |
| 7 | +5 | 0.50 | 3.5 |
| 8 & 5 | +12 or -12 | 0.10 | 0.31 |
| 8 & 5 | +15 or -15 | 0.10 | 0.25 |

NOTE:

- Maximum total power from all outputs is limited to 25 watts but no output should be allowed to exceed its maximum current.
- Minimum current on each output is required to maintain specified regulation.