

- Wide 4 : 1 Input Range
- High Efficiency
- Regulated Outputs
- 1500V Isolation
- Integral Finned Heatsink
- EN60950 & UL1950 Approved

## ASD10H Series



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

### MODEL SELECTIONS

| Output Voltage       | Output Amps | Input Range | Model Number | Price 1 | Price 25 |
|----------------------|-------------|-------------|--------------|---------|----------|
| <b>SINGLE OUTPUT</b> |             |             |              |         |          |
| 3.3 VDC              | 2.5         | 9-36VDC     | ASD10H-12S3  | \$45    | \$43     |
|                      | 2.5         | 18-75VDC    | ASD10H-48S3  | \$45    | \$43     |
| 5 VDC                | 2           | 9-36VDC     | ASD10H-12S5  | \$45    | \$43     |
|                      | 2           | 18-75VDC    | ASD10H-48S5  | \$45    | \$43     |
| 9 VDC                | 1.1         | 9-36VDC     | ASD10H-12S9  | \$45    | \$43     |
|                      | 1.1         | 18-75VDC    | ASD10H-48S9  | \$45    | \$43     |
| 12 VDC               | 0.83        | 9-36VDC     | ASD10H-12S12 | \$45    | \$43     |
|                      | 0.83        | 18-75VDC    | ASD10H-48S12 | \$45    | \$43     |
| 15 VDC               | 0.67        | 9-36VDC     | ASD10H-12S15 | \$45    | \$43     |
|                      | 0.67        | 18-75VDC    | ASD10H-48S15 | \$45    | \$43     |
| <b>DUAL OUTPUT</b>   |             |             |              |         |          |
| +/-5 VDC             | +/-1        | 9-36VDC     | ASD10H-12D5  | \$50    | \$48     |
|                      | +/-1        | 18-75VDC    | ASD10H-48D5  | \$50    | \$48     |
| +/-12 VDC            | +/-0.42     | 9-36VDC     | ASD10H-12D12 | \$50    | \$48     |
|                      | +/-0.42     | 18-75VDC    | ASD10H-48D12 | \$50    | \$48     |
| +/-15 VDC            | +/-0.33     | 9-36VDC     | ASD10H-12D15 | \$50    | \$48     |
|                      | +/-0.33     | 18-75VDC    | ASD10H-48D15 | \$50    | \$48     |

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## INPUT SPECIFICATIONS

|                        |                                                                     |
|------------------------|---------------------------------------------------------------------|
| Input Voltage, Nominal | 12VDC 48VDC                                                         |
| Input Voltage Ranges   | 9-36 18-75 VDC                                                      |
| Input Surge Voltage    | 50V (12V Models), *<br>100V (48V Models), *<br>10 mS duration, min. |

## OUTPUT SPECIFICATIONS

|                           |                                            |
|---------------------------|--------------------------------------------|
| Voltage and Current       | See Selection Chart                        |
| Preset Accuracy           | Singles: +/- 1% max.<br>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 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)<br>Logic "1"/Open=ON<br>Logic "0"/GND=OFF |
| Shutdown Idle Current | 15mA                                                           |
| Input-Out Isolation   | 1500VDC (48V)<br>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<br>Mil Std 217, 25C<br>To MIL-STD 810C |
| Shock/Vibration       |                                                      |
| Safety                |                                                      |
| EN60950               | TUV File # B 98 04 22749 010                         |
| UL 1950               | UL File # E167432                                    |

\* 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.

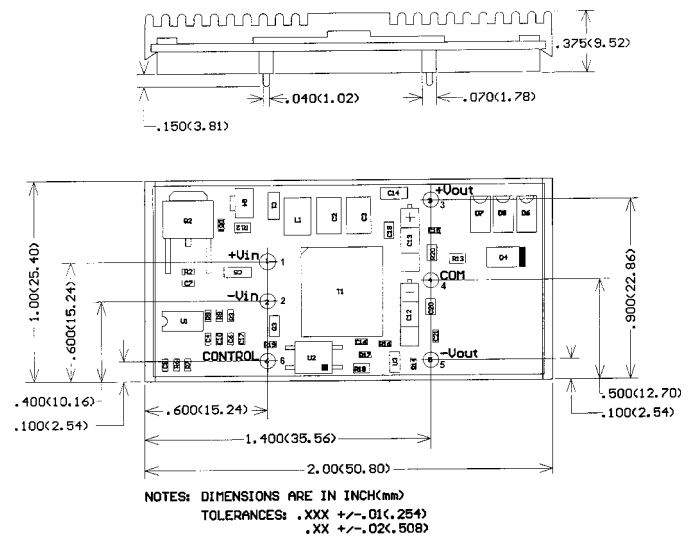
# MicroBrick 10 WATT

## Open Frame DC/DC Converters

## PHYSICAL SPECIFICATIONS

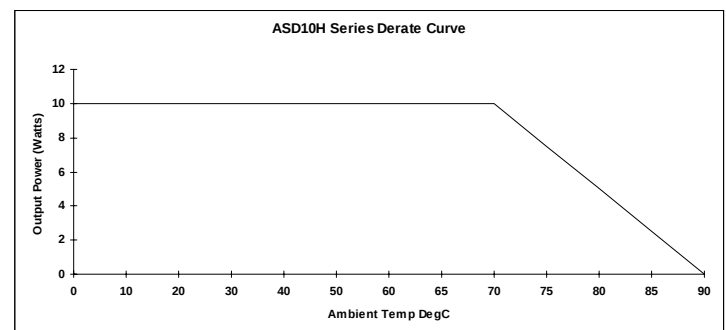
|                   |                |
|-------------------|----------------|
| Heatsink Material | Aluminum       |
| Construction      | Open Frame     |
| Weight            | 0.57 oz, (16g) |

## 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



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.