



Unit measures 1.6"W x 2"L x 0.375"H

- Wide 4:1 Input Range
- 9 to 36V or 18 to 75V Available
- High Efficiency
- Regulated Outputs
- 1500VDC Isolation
- Full EMI Shielding
- Standard Pinouts

| Model Number         | Output Voltage | Output Amps | Input Range |
|----------------------|----------------|-------------|-------------|
| <b>SINGLE OUTPUT</b> |                |             |             |
| ASD15-12S3           | 3.3 VDC        | 3.75        | 9-18VDC     |
| ASD15-48S3           |                | 3.75        | 20-75VDC    |
| ASD15-12S5           | 5 VDC          | 3           | 9-18VDC     |
| ASD15-48S5           |                | 3           | 20-75VDC    |
| ASD15-12S12          | 12 VDC         | 1.25        | 9-18VDC     |
| ASD15-48S12          |                | 1.25        | 20-75VDC    |
| ASD15-12S15          | 15 VDC         | 1           | 9-18VDC     |
| ASD15-48S15          |                | 1           | 20-75VDC    |
| <b>DUAL OUTPUT</b>   |                |             |             |
| ASD15-12D5           | +/-5 VDC       | +/-1.5      | 9-18VDC     |
| ASD15-48D5           |                | +/-1.5      | 20-75VDC    |
| ASD15-12D12          | +/-12 VDC      | +/-0.62     | 9-18VDC     |
| ASD15-48D12          |                | +/-0.62     | 20-75VDC    |
| ASD15-12D15          | +/-15 VDC      | +/-0.5      | 9-18VDC     |
| ASD15-48D15          |                | +/-0.5      | 20-75VDC    |

**INPUT SPECIFICATIONS**

|                        |                      |           |
|------------------------|----------------------|-----------|
| Input Voltage, Nominal | 12VDC                | 48VDC     |
| Input Voltage Ranges   | 9-18                 | 20-75 VDC |
| Input Surge Voltage    | 50V (12V Models), *  |           |
|                        | 100V (48V Models), * |           |
|                        | 10 mS duration, min. |           |

**OUTPUT SPECIFICATIONS**

|                          |   |
|--------------------------|---|
| Voltage and Current      | See Selection Chart   |
| Load Regulation          | single: $\pm 0.5\%$   |
| 20% - FL                 | duals: $\pm 1\%$ , $\pm 3\%$ (5V mod)                                       |
| Preset Accuracy          | single: $\pm 3\%$ max.<br>duals: $\pm 4\%$ max.                             |
| Line Regulation          | single: $\pm 0.5\%$<br>duals: $\pm 1\%$                                     |
| Trim Range               | 0.5V min, 0.65V typ   |
| Temperature Coefficient  | $\pm 0.01\%/^{\circ}\text{C}$   |
| Ripple/Noise (Note 1)    | 100mV Pk-Pk, typ.   |
| Overvoltage Protection   | Clamp, 130-150% *   |
| Voltage Stability        | $\pm 0.05\%$ , max  |
| Transient Response       | 12V: $\pm 4\%$ , max<br>15V: $\pm 3\%$ , max<br>All others: $\pm 2\%$ , max |
| Short Circuit Protection | Clamp, need to release load   |

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**

|                          |  |
|--------------------------|--|
| 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 at nom. Input | 12V: 73%-80%, typ.<br>48V: 80%-86%, typ.                       |
| Switching Frequency      | 450Khz   |

**ENVIRONMENTAL SPECIFICATIONS**

|                     |                   |
|---------------------|-------------------|
| Oper. Temperature   | -25 to +71°C(FL)  |
| Storage Temperature | -40 to +125°C *   |
| Maximum Case Temp   | 110°C *           |
| Input Fusing        | 12V: 4A, 48V: 2A  |
| MTBF                | 1,000,000 Hrs     |
|                     | Mil Std 217, 25°C |
| Shock/Vibration     | To MIL-STD 810°C  |

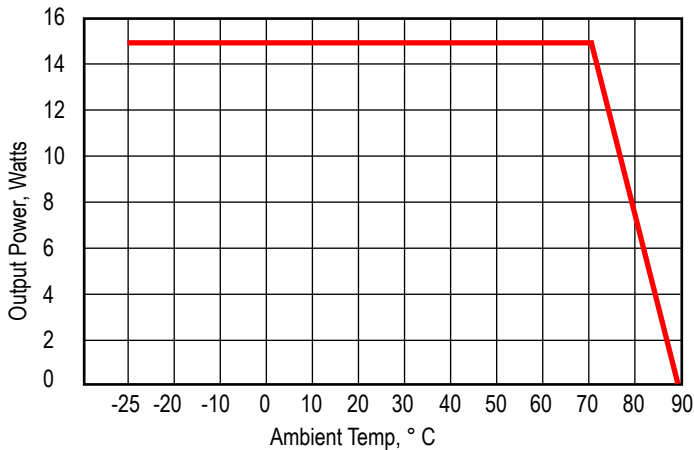
**PHYSICAL SPECIFICATIONS**

|               |                    |
|---------------|--------------------|
| Case Material | Aluminum           |
| Construction  | Fully Encapsulated |
| Weight        | 1.6 oz, (40g)      |

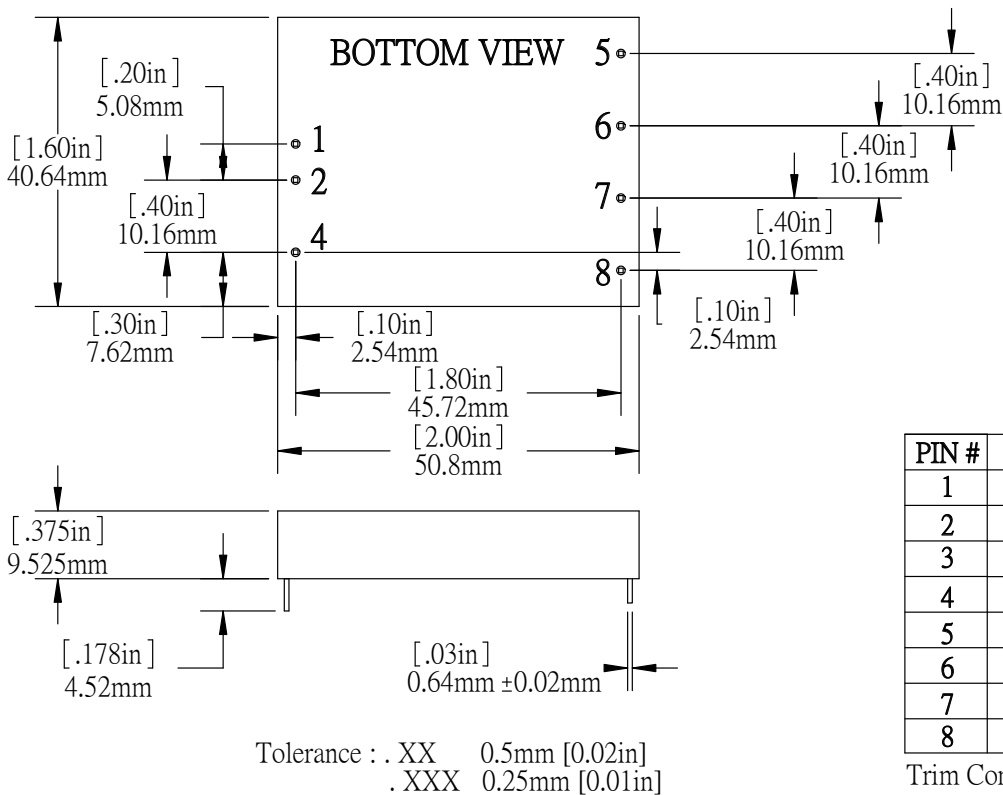
**NOTES**

1. Ripple & Noise is measured by using a 20MHz bandwidth oscilloscope and terminating the output with a 47uF electrolytic capacitor paralleled with a 0.1uF ceramic capacitor.

### OUTPUT DERATING CURVE



### MECHANICAL DIMENSIONS



| PIN # | Single Outputs | Dual Outputs |
|-------|----------------|--------------|
| 1     | + Input        | + Input      |
| 2     | - Input        | - Input      |
| 3     | No Pin         | No Pin       |
| 4     | Control        | Control      |
| 5     | No Pin         | + Output     |
| 6     | + Output       | Out.Ret.     |
| 7     | Out.Ret.       | - Output     |
| 8     | Trim           | Trim         |

Trim Connections

