



FEATURES:

- Wide Input Range (4:1)
- 24 Pin DIP Package
- Metal package
- High efficiency up to 75%
- Operating temperature -40°C to + 85°C
- Input / Output isolation 1500 VDC
- Pin compatible with multiple manufacturers
- Continuous short circuit protection



Models
Single output

| Model | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Capacitive load, max (μF) | Efficiency (%) |
|-----------------|-------------------|--------------------|-------------------------|---------------------------|----------------|
| AM4TW-2403S-RVZ | 9-36 | 3.3 | 1000 | 1000 | 66 |
| AM4TW-2405S-RVZ | 9-36 | 5 | 800 | 1000 | 71 |
| AM4TW-2412S-RVZ | 9-36 | 12 | 333 | 320 | 74 |
| AM4TW-2415S-RVZ | 9-36 | 15 | 266 | 220 | 74 |
| AM4TW-4803S-RVZ | 18-72 | 3.3 | 1000 | 1000 | 66 |
| AM4TW-4805S-RVZ | 18-72 | 5 | 800 | 1000 | 72 |
| AM4TW-4812S-RVZ | 18-72 | 12 | 333 | 320 | 73 |
| AM4TW-4815S-RVZ | 18-72 | 15 | 266 | 220 | 74 |

Models
Dual output

| Model | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Capacitive load, max (μF) | Efficiency (%) |
|-----------------|-------------------|--------------------|-------------------------|---------------------------|----------------|
| AM4TW-2405D-RVZ | 9-36 | ±5 | ±400 | ±470 | 70 |
| AM4TW-2412D-RVZ | 9-36 | ±12 | ±166 | ±100 | 72 |
| AM4TW-2415D-RVZ | 9-36 | ±15 | ±133 | ±68 | 75 |
| AM4TW-4805D-RVZ | 18-72 | ±5 | ±400 | ±470 | 70 |
| AM4TW-4812D-RVZ | 18-72 | ±12 | ±166 | ±100 | 72 |
| AM4TW-4815D-RVZ | 18-72 | ±15 | ±133 | ±68 | 73 |

Input Specifications

| Parameters | Nominal | Typical | Maximum | Units |
|-------------------------|----------------|---------|---------|-------|
| Voltage Range | 24 | 9-36 | | VDC |
| | 48 | 18-72 | | |
| Filter | π (Pi) Network | | | |
| Start up time | | 20 | | Ms |
| Peak Input Voltage time | | 15 | | Ms |
| Absolute Max Rating | 24 Vin | -0.7-40 | | VDC |

Isolation Specifications

| Parameters | Conditions | Typical | Rated | Units |
|--------------------|------------|---------|-------|-------|
| Tested I/O voltage | 3 sec | | 1500 | VDC |
| Resistance | | > 1000 | | MOhm |
| Capacitance | | 60 | | pF |

Output Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|--------------------------|--------------------|---------|---------|--------|
| Voltage Balance | Balanced Load | ±1 | | % |
| Voltage accuracy | | ±1 | | % |
| Short circuit protection | Continuous | | | |
| Short circuit restart | Auto Recovery | | | |
| Line voltage regulation | | ±0.5 | | % |
| Load voltage regulation | | ±0.5 | | % |
| Temperature coefficient | | ±0.02 | | %/°C |
| Ripple & Noise | At 20MHz Bandwidth | 60 | | mV p-p |

General Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|-----------------------|---|-------------------------|--------------------------|-------|
| Switching frequency | 100% load | 100-400 | | KHz |
| Operating temperature | Full Load (see derating chart) | -40 to +85 | | °C |
| Storage temperature | | -40 to +125 | | °C |
| Max Case temperature | | | 100 | °C |
| Cooling | Free air convection | | | |
| Humidity | | | 95 | % |
| Case material | Nickel coated copper | | | |
| Weight | | 15 | | g |
| Dimensions(L x W x H) | Tolerance ± 0.5 mm or ± 0.02 inches | 1.25 x 0.8 x 0.4 inches | 31.75 x 20.32 x 10.16 mm | |
| MTBF | >2,200,000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C) | | | |

Safety Specifications

Parameters

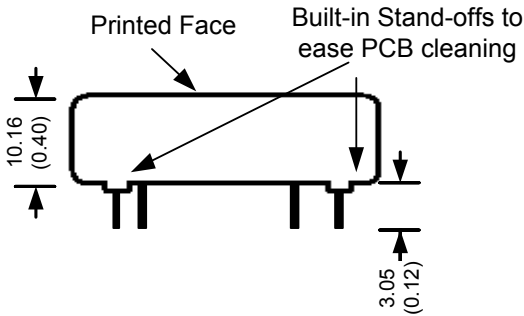
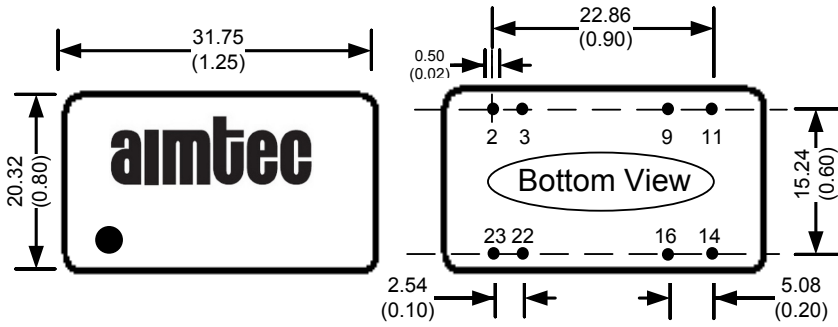
| | |
|-----------|------------------------------|
| Standards | Designed to meet IEC 60950-1 |
|-----------|------------------------------|

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Pin Out Specifications

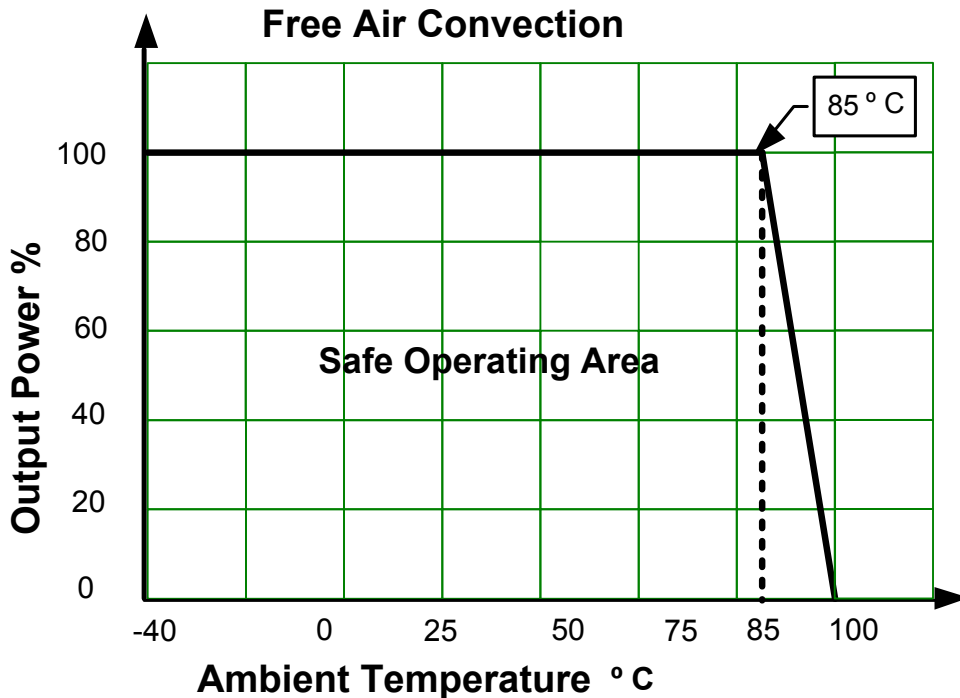
| Pin | 1500 VDC | |
|-----|-----------|-----------|
| | Single | Dual |
| 2 | -V Input | -V Input |
| 3 | -V Input | -V Input |
| 9 | No pin | Common |
| 11 | N.C. | -V Output |
| 14 | +V Output | +V Output |
| 16 | -V Output | Common |
| 22 | +V Input | +V Input |
| 23 | +V Input | +V Input |

Dimensions



All dimensions are typical: millimeters (inches)
 Pin Diameter: 0.50 ± 0.05 (0.02 ± 0.002)
 Pin Pitch Tolerance: ± 0.35 (± 0.014)
 Case Tolerance: ± 0.5 (± 0.02)

Derating



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