



**FEATURES:**

- RoHS compliant
- 24 Pin DIP Package
- Wide 4:1 input range
- High efficiency up to 85%
- Operating temperature -40 to + 71°C
- Input / Output Isolation 1500VDC
- Pin compatible with multiple manufacturers
- Continuous short circuit protection

**Models**

**Single output**

| Model          | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM6TW-2403S-RZ | 9-36              | 3.3                | 1400                    | 1500            | 75             |
| AM6TW-2405S-RZ | 9-36              | 5                  | 1200                    | 1500            | 81             |
| AM6TW-2407S-RZ | 9-36              | 7.2                | 830                     | 1500            | 82             |
| AM6TW-2409S-RZ | 9-36              | 9                  | 660                     | 1500            | 82             |
| AM6TW-2412S-RZ | 9-36              | 12                 | 500                     | 1500            | 83             |
| AM6TW-2415S-RZ | 9-36              | 15                 | 400                     | 1500            | 83             |
| AM6TW-2418S-RZ | 9-36              | 18                 | 330                     | 1500            | 83             |
| AM6TW-2424S-RZ | 9-36              | 24                 | 250                     | 1500            | 82             |
| AM6TW-4803S-RZ | 18-72             | 3.3                | 1400                    | 1500            | 75             |
| AM6TW-4805S-RZ | 18-72             | 5                  | 1200                    | 1500            | 81             |
| AM6TW-4807S-RZ | 18-72             | 7.2                | 830                     | 1500            | 82             |
| AM6TW-4809S-RZ | 18-72             | 9                  | 660                     | 1500            | 82             |
| AM6TW-4812S-RZ | 18-72             | 12                 | 500                     | 1500            | 82             |
| AM6TW-4815S-RZ | 18-72             | 15                 | 400                     | 1500            | 85             |
| AM6TW-4818S-RZ | 18-72             | 18                 | 330                     | 1500            | 83             |
| AM6TW-4824S-RZ | 18-72             | 24                 | 250                     | 1500            | 83             |

**Models**

**Dual output**

| Model          | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM6TW-2403D-RZ | 9-36              | ±3.3               | ±700                    | 1500            | 80             |
| AM6TW-2405D-RZ | 9-36              | ±5                 | ±600                    | 1500            | 82             |
| AM6TW-2407D-RZ | 9-36              | ±7.2               | ±410                    | 1500            | 82             |
| AM6TW-2409D-RZ | 9-36              | ±9                 | ±330                    | 1500            | 82             |
| AM6TW-2412D-RZ | 9-36              | ±12                | ±250                    | 1500            | 84             |
| AM6TW-2415D-RZ | 9-36              | ±15                | ±200                    | 1500            | 80             |
| AM6TW-2418D-RZ | 9-36              | ±18                | ±165                    | 1500            | 80             |
| AM6TW-2424D-RZ | 9-36              | ±24                | ±125                    | 1500            | 81             |
| AM6TW-4803D-RZ | 18-72             | ±3.3               | ±700                    | 1500            | 79             |
| AM6TW-4805D-RZ | 18-72             | ±5                 | ±600                    | 1500            | 82             |
| AM6TW-4807D-RZ | 18-72             | ±7.2               | ±410                    | 1500            | 81             |
| AM6TW-4809D-RZ | 18-72             | ±9                 | ±330                    | 1500            | 81             |
| AM6TW-4812D-RZ | 18-72             | ±12                | ±250                    | 1500            | 83             |
| AM6TW-4815D-RZ | 18-72             | ±15                | ±200                    | 1500            | 81             |
| AM6TW-4818D-RZ | 18-72             | ±18                | ±165                    | 1500            | 81             |
| AM6TW-4824D-RZ | 18-72             | ±24                | ±125                    | 1500            | 81             |

**Input Specifications**

| Parameters                     | Nominal  | Typical        | Maximum | Units |
|--------------------------------|----------|----------------|---------|-------|
| Voltage range                  | 24<br>48 | 9-36<br>18-72  |         | VDC   |
| Filter                         |          | π (Pi) Network |         |       |
| Turn on Transient process time |          |                | 350     | ms    |
| Start up time                  |          | 500            |         | ms    |

### Input Specifications (continued)

| Parameters              | Nominal          | Typical            | Maximum | Units |
|-------------------------|------------------|--------------------|---------|-------|
| Absolute Maximum Rating | 24 Vin<br>48 Vin | -0.7-40<br>-0.7-80 |         | VDC   |
| Peak Input Voltage time |                  | 100                |         | ms    |

### Isolation Specifications

| Parameters     | Conditions | Typical | Maximum | Units |
|----------------|------------|---------|---------|-------|
| Tested voltage | 3 sec      | 1500    |         | VDC   |
| Resistance     |            | > 1000  |         | MOhm  |
| Capacitance    |            | 500     |         | pF    |

### Output Specifications

| Parameters  | Conditions | Typical   | Maximum | Units  |
|---|------------|-----------|---------|--------|
| Voltage accuracy                                      |            | ±1        |         | %      |
| Voltage balance                                       |            | ±1        |         | %      |
| Short Circuit protection                              | Continuous |           |         |        |
| Short circuit restart                                 | Automatic  |           |         |        |
| Over current protection                               |            | 120% Iout |         |        |
| Line voltage regulation (Single)                      |            | ±0.5      |         | %      |
| Line voltage regulation (Dual)                        |            | ±0.5      |         | %      |
| Load voltage regulation (Single)                      |            | ±0.5      |         | %      |
| Load voltage regulation (Single)<br>3.3V output model |            | ±1.5      |         | %      |
| Load voltage regulation (Dual)                        |            | ±0.5      |         | %      |
| Load voltage regulation (Dual) ±                      |            | ±1.5      |         | %      |
| Temperature coefficient                               |            | ±0.02     |         | %/°C   |
| Ripple & Noise  |            | 60        |         | mV p-p |
| Rising time   |            | 10        |         | ms     |

### General Specifications

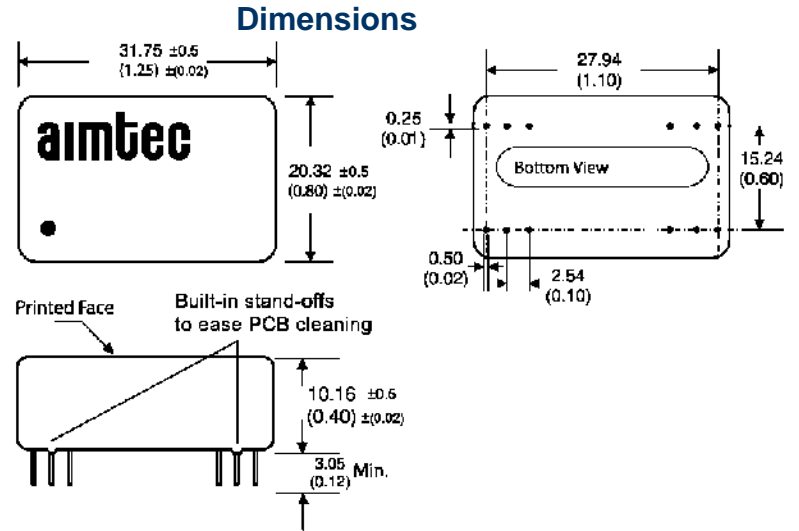
| Parameters            | Conditions                        | Typical   | Maximum                  | Units |
|-----------------------|-----------------------------------|---|--------------------------|-------|
| Switching frequency   | 100% load                         | 260   |                          | KHz   |
| Operating temperature | Full Load without Derating        | -40 to +71  |                          | °C    |
| Storage temperature   |                                   | -40 to +125   |                          | °C    |
| Case temperature      |                                   |   | +100                     | °C    |
| Cooling               |                                   | Free air convection                                     |                          |       |
| Humidity              | Non condensing                    |   | 90                       | %     |
| Case material         |                                   | Nickel coated copper                                    |                          |       |
| Weight                |                                   | 26  |                          | g     |
| Dimensions            | Tolerance ±0.5 mm or ±0.02 inches | 1.25 x 0.80 x 0.40 inches                               | 31.75 x 20.32 x 10.16 mm |       |
| MTBF                  |                                   | >1 050 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C) |                          |       |

### Safety Specifications

| Standards        |  |
|------------------|--|
| Agency approvals | CE   |
| Safety           | EN55022 (Conducted and Radiated Emissions), class A; IEC60950-1:2001 |

### Pin Out Specifications

| Pin   | Single    | Dual      |
|-------|-----------|-----------|
| 1     | Omitted   | Omitted   |
| 2     | -V Input  | -V Input  |
| 3     | -V Input  | -V Input  |
| 9     | Omitted   | Common    |
| 10    | Omitted   | Omitted   |
| 11    | N.C.      | -V Output |
| 12/13 | Omitted   | Omitted   |
| 14    | +V Output | +V Output |
| 15    | Omitted   | Omitted   |
| 16    | -V Output | Common    |
| 22    | +V Input  | +V Input  |
| 23    | +V Input  | +V Input  |
| 24    | Omitted   | Omitted   |



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