



### FEATURES:

- RoHS compliant
- 24 Pin DIP Package
- High efficiency up to 82%
- Wide 4:1 input range
- Operating temperature -40°C to + 85°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 (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM3TW-2403S-RZ | 9-36              | 3.3                | 900                     | 1500            | 75             |
| AM3TW-2405S-RZ | 9-36              | 5                  | 600                     | 1500            | 78             |
| AM3TW-2407S-RZ | 9-36              | 7.2                | 417                     | 1500            | 78             |
| AM3TW-2409S-RZ | 9-36              | 9                  | 334                     | 1500            | 79             |
| AM3TW-2412S-RZ | 9-36              | 12                 | 250                     | 1500            | 81             |
| AM3TW-2415S-RZ | 9-36              | 15                 | 200                     | 1500            | 81             |
| AM3TW-2418S-RZ | 9-36              | 18                 | 167                     | 1500            | 81             |
| AM3TW-2424S-RZ | 9-36              | 24                 | 125                     | 1500            | 81             |
| AM3TW-4803S-RZ | 18-72             | 3.3                | 900                     | 1500            | 76             |
| AM3TW-4805S-RZ | 18-72             | 5                  | 600                     | 1500            | 80             |
| AM3TW-4807S-RZ | 18-72             | 7.2                | 417                     | 1500            | 78             |
| AM3TW-4809S-RZ | 18-72             | 9                  | 334                     | 1500            | 82             |
| AM3TW-4812S-RZ | 18-72             | 12                 | 250                     | 1500            | 80             |
| AM3TW-4815S-RZ | 18-72             | 15                 | 200                     | 1500            | 80             |
| AM3TW-4818S-RZ | 18-72             | 18                 | 167                     | 1500            | 80             |
| AM3TW-4824S-RZ | 18-72             | 24                 | 125                     | 1500            | 81             |

### Models

#### Dual output

| Model          | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM3TW-2403D-RZ | 9-36              | ±3.3               | ±450                    | 1500            | 76             |
| AM3TW-2405D-RZ | 9-36              | ±5                 | ±300                    | 1500            | 79             |
| AM3TW-2407D-RZ | 9-36              | ±7                 | ±208                    | 1500            | 78             |
| AM3TW-2409D-RZ | 9-36              | ±9                 | ±167                    | 1500            | 79             |
| AM3TW-2412D-RZ | 9-36              | ±12                | ±125                    | 1500            | 80             |
| AM3TW-2415D-RZ | 9-36              | ±15                | ±100                    | 1500            | 80             |
| AM3TW-2418D-RZ | 9-36              | ±18                | ±84                     | 1500            | 81             |
| AM3TW-2424D-RZ | 9-36              | ±24                | ±63                     | 1500            | 80             |
| AM3TW-4803D-RZ | 18-72             | ±3.3               | ±400                    | 1500            | 76             |
| AM3TW-4805D-RZ | 18-72             | ±5                 | ±300                    | 1500            | 81             |
| AM3TW-4807D-RZ | 18-72             | ±7                 | ±208                    | 1500            | 78             |
| AM3TW-4809D-RZ | 18-72             | ±9                 | ±167                    | 1500            | 82             |
| AM3TW-4812D-RZ | 18-72             | ±12                | ±125                    | 1500            | 81             |
| AM3TW-4815D-RZ | 18-72             | ±15                | ±100                    | 1500            | 82             |
| AM3TW-4818D-RZ | 18-72             | ±18                | ±84                     | 1500            | 81             |
| AM3TW-4824D-RZ | 18-72             | ±24                | ±63                     | 1500            | 81             |

### Input Specifications

| Parameters    | Conditions     | Typical | Maximum | Units |
|---------------|----------------|---------|---------|-------|
| Voltage range | 24             | 9-36    |         | VDC   |
|               | 48             | 18-72   |         |       |
| Filter        | π (Pi) Network |         |         |       |

### Isolation Specifications

| Parameters    | Conditions | Typical | Maximum | Units |
|---------------|------------|---------|---------|-------|
| Rated voltage | 60 sec     | 1500    |         | VDC   |
| Resistance    |            | > 1000  |         | MOhm  |
| Capacitance   |            | 390     |         | pF    |

### Output Specifications

| Parameters                       | Conditions         | Typical | Maximum | Units  |
|----------------------------------|--------------------|---------|---------|--------|
| Voltage accuracy                 |                    |         | ±1      | %      |
| Voltage balance                  | Dual output        | ±1      |         | %      |
| Short Circuit protection         | Continuous         |         |         |        |
| Short circuit restart            | Automatic          |         |         |        |
| Line voltage regulation (Single) | LL-HL              |         | ±0.5    | %      |
| Line voltage regulation (Dual)   | LL-HL              |         | ±0.5    | %      |
| Load voltage regulation (Single) | Load: 10...100%    |         | ±0.5    | %      |
| Load voltage regulation (Dual)   | Load: 10...100%    |         | ±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            | 260   |                          | KHz   |
| Operating temperature |                      | -40 to +85  |                          | °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                |                      | 21  |                          | g     |
| Dimensions            |                      | 1.25 x 0.8 x 0.4 inches                                 | 31.75 x 20.32 x 10.16 mm |       |
| MTBF                  |                      | >1 050 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C) |                          |       |

### Pin Out Specifications

| Pin | 1500VDC   |           |
|-----|-----------|-----------|
|     | 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

