



FEATURES:

- RoHS compliant
- Wide 4:1 input range
- High efficiency up to 86%
- Shielded metal package
- Operating temperature -40°C 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-NZ | 9-36 | 3.3 | 1500 | 1500 | 74 |
| AM6TW-2405S-NZ | 9-36 | 5 | 1200 | 1500 | 76 |
| AM6TW-2412S-NZ | 9-36 | 12 | 500 | 1500 | 78 |
| AM6TW-2415S-NZ | 9-36 | 15 | 400 | 1500 | 82 |
| AM6TW-2424S-NZ | 9-36 | 24 | 250 | 1500 | 85 |
| AM6TW-4803S-NZ | 18-72 | 3.3 | 1500 | 1500 | 76 |
| AM6TW-4805S-NZ | 18-72 | 5 | 1200 | 1500 | 78 |
| AM6TW-4812S-NZ | 18-72 | 12 | 500 | 1500 | 81 |
| AM6TW-4815S-NZ | 18-72 | 15 | 400 | 1500 | 84 |
| AM6TW-4824S-NZ | 18-72 | 24 | 250 | 1500 | 85 |

Models

Dual output

| Model | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM6TW-2405D-NZ | 9-36 | ±5 | ±600 | 1500 | 77 |
| AM6TW-2412D-NZ | 9-36 | ±12 | ±250 | 1500 | 79 |
| AM6TW-2415D-NZ | 9-36 | ±15 | ±200 | 1500 | 83 |
| AM6TW-2424D-NZ | 9-36 | ±24 | ±125 | 1500 | 85 |
| AM6TW-4805D-NZ | 18-72 | ±5 | ±600 | 1500 | 80 |
| AM6TW-4812D-NZ | 18-72 | ±12 | ±250 | 1500 | 83 |
| AM6TW-4815D-NZ | 18-72 | ±15 | ±200 | 1500 | 85 |
| AM6TW-4824D-NZ | 18-72 | ±24 | ±125 | 1500 | 86 |

Input Specifications

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

Isolation Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|---------------|------------|---------|---------|-------|
| Rated voltage | | 1500 | | VDC |
| Resistance | | > 1000 | | MOhm |

Output Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|----------------------------------|------------|---------------|---------|-------|
| Voltage accuracy (single output) | | | ±1 | % |
| Voltage accuracy (dual output) | | ±1p. and ±3n. | | % |
| Short Circuit protection | Continuous | | | |
| Short circuit restart | Automatic | | | |
| Line voltage regulation (Single) | | | ±0.5 | % |

Output Specifications (continued)

| Parameters | Conditions | Typical | Maximum | Units |
|----------------------------------|------------|---------|---------|--------|
| Line voltage regulation (Dual) | | | ±0.5 | % |
| Load voltage regulation (Single) | | | ±1 | % |
| Load voltage regulation (Dual) | | | ±1 | % |
| Temperature coefficient | | ±0.02 | | %/°C |
| Ripple | | 30 | | mV p-p |
| Noise | | 100 | | mV p-p |

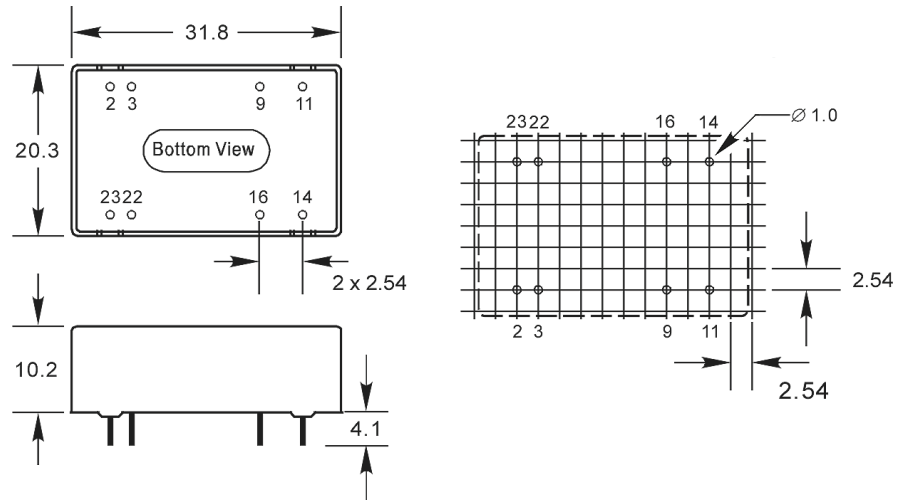
General Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|-----------------------|---------------------|---|--------------------------|-------|
| Switching frequency | Single 100% load | 300 | | KHz |
| | dual 100% load | 250 | | KHz |
| Operating temperature | | -40 to +71 | | °C |
| Storage temperature | | -55 to +125 | | °C |
| Case temperature | | | 100 | °C |
| Derating | | Non-Required | | |
| Cooling | Free air convection | | | |
| Humidity | Non condensing | | 95 | % |
| Case material | | Metal | | |
| Weight | | 26 | | g |
| Dimensions | | 1.25 x 0.8 x 0.4 inches | 31.75 x 20.32 x 10.16 mm | |
| MTBF | | >1 000 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C) | | |

Pin Out Specifications

| Pin | 1500VDC | |
|-------|-----------|-----------|
| | Single | Dual |
| 1 | No pin | No pin |
| 2 | -V Input | -V Input |
| 3 | -V Input | -V Input |
| 9 | No pin | Common |
| 10 | No pin | No pin |
| 11 | N.C. | -V Output |
| 12/13 | No pin | No pin |
| 14 | +V Output | +V Output |
| 15 | No pin | No pin |
| 16 | -V Output | Common |
| 22 | +V Input | +V Input |
| 23 | +V Input | +V Input |
| 24 | No pin | No pin |

Dimensions

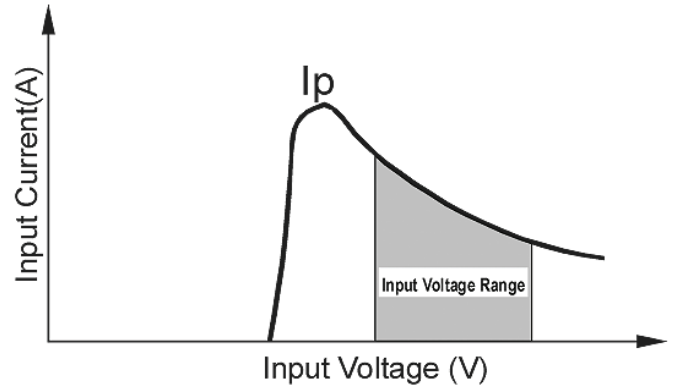
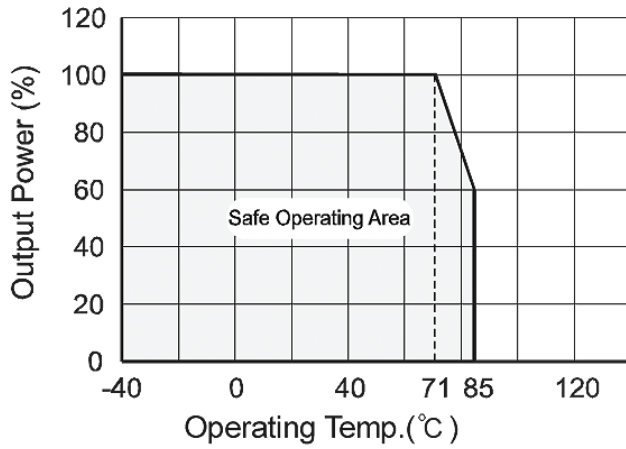


External Capacitor Single and Dual

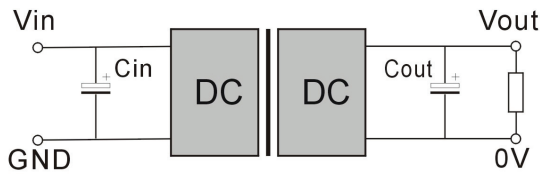
| Vin (V) | Cin (uF) | Vout (V) | Cout |
|---------|----------|----------|---------------------------|
| 24 | 100 | 5 | 100 uF each 1A current |
| 48 | 100 | 12 | |
| | | 15 | |
| | | 24 | |

Typical characteristics

Temperature Derating Graph



Recommended Circuit – Single Output



Recommended Circuit –Dual Output

