



FEATURES:

- RoHS compliant
- Regulated output voltage
- Low ripple and noise
- High efficiency up to 73%
- Operating temperature -40°C to + 85°C
- Input / Output Isolation 1000VDC
- Pin computable with multiple manufacturers
- UL94-VO Package

Models Single output

| Model | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM1DR-0505S-NZ | 4.75-5.25 | 5 | 150 | 1000 | 69 |
| AM1DR-0509S-NZ | 4.75-5.25 | 9 | 111 | 1000 | 70 |
| AM1DR-0512S-NZ | 4.75-5.25 | 12 | 84 | 1000 | 71 |
| AM1DR-0515S-NZ | 4.75-5.25 | 15 | 67 | 1000 | 72 |
| AM1DR-1205S-NZ | 11.4-12.6 | 5 | 150 | 1000 | 69 |
| AM1DR-1209S-NZ | 11.4-12.6 | 9 | 111 | 1000 | 71 |
| AM1DR-1212S-NZ | 11.4-12.6 | 12 | 84 | 1000 | 72 |
| AM1DR-1215S-NZ | 11.4-12.6 | 15 | 67 | 1000 | 72 |
| AM1DR-2405S-NZ | 22.8-25.2 | 5 | 150 | 1000 | 70 |
| AM1DR-2409S-NZ | 22.8-25.2 | 9 | 111 | 1000 | 72 |
| AM1DR-2412S-NZ | 22.8-25.2 | 12 | 84 | 1000 | 73 |
| AM1DR-2415S-NZ | 22.8-25.2 | 15 | 67 | 1000 | 73 |

Input Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|---------------|------------|-----------|---------|-------|
| Voltage range | | 4.75-5.25 | | VDC |
| | | 11.4-12.6 | | |
| | | 22.8-25.2 | | |
| Filter | Capacitor | | | |

Isolation Specifications

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

Output Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|----------------------------------|--------------------|---------|---------|--------|
| Voltage accuracy | | | ±3 | % |
| Short Circuit protection | | 1sec | | |
| Line voltage regulation (Single) | Input voltage: ±5% | | ±0.25 | % |
| Load voltage regulation (Single) | 10-100% | | ±1 | % |
| Temperature coefficient | | | ±0.03 | %/°C |
| Ripple & Noise | | | 50 | mV p-p |

General Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|-----------------------|----------------------|-------------|---------|-------|
| Switching frequency | 100% load | 100KHz | | |
| Operating temperature | Derating above 71 °C | -40 to +85 | | °C |
| Storage temperature | | -55 to +125 | | °C |
| Cooling | Free air convection | | | |
| Humidity | | | 95 | % |

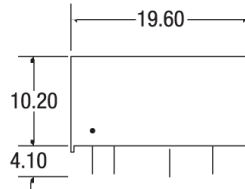
General Specifications (continued)

| Parameters | Conditions | Typical | Maximum | Units |
|---------------|------------|---|------------------------|-------|
| Case material | | Plastic UL94-VO | | |
| Weight | | 2.7 | | g |
| Dimensions | | 0.77 x 0.24 x 0.4 inch | 19.5 x 6.00 x 10.00 mm | |
| MTBF | | >900 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C) | | |

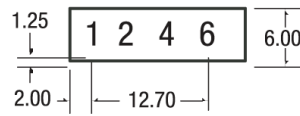
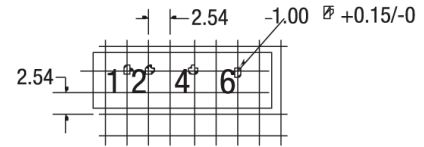
Pin Out Specification

| Pin | Single 1000 VDC |
|-----|-----------------|
| 1 | + V Input |
| 2 | - V Input |
| 4 | - V Output |
| 5 | No pin |
| 6 | + V Output |
| 7 | No pin |

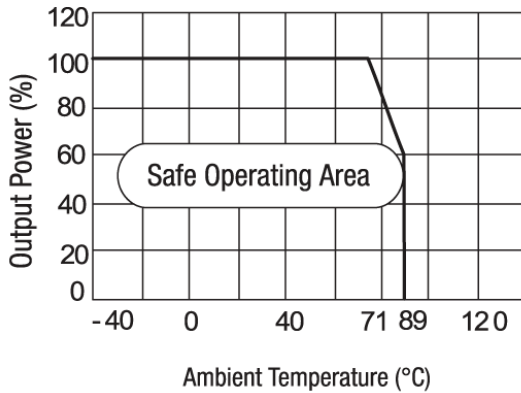
Dimensions



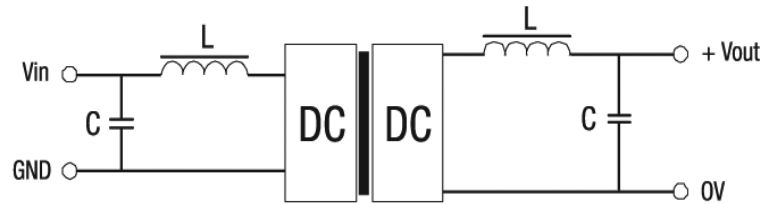
Footprint



Temperature Derating Graph



Filtering



External capacitor

| Vin (VDC) | External capacitor (uF) | Vout (VDC) | External capacitor (uF) |
|-----------|-------------------------|------------|-------------------------|
| 5 | 4.7 | 5 | 10 |
| 12 | 2.2 | 9 | 4.7 |
| 24 | 1 | 12 | 2.2 |
| - | - | 15 | 1 |