



FEATURES:

- RoHS compliant
- 24 Pin DIP Package
- Low profile plastic package
- High efficiency up to 82%
- Operating temperature -40°C to + 85°C
- Input / Output Isolation 6000VDC
- Pin compatible with multiple manufacturers

Models

Single output

| Model | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|------------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM2N-0505SH60-NZ | 4.5-5.5 | 5 | 400 | 6000 | 78 |
| AM2N-0509SH60-NZ | 4.5-5.5 | 9 | 222 | 6000 | 79 |
| AM2N-0512SH60-NZ | 4.5-5.5 | 12 | 167 | 6000 | 80 |
| AM2N-0515SH60-NZ | 4.5-5.5 | 15 | 133 | 6000 | 80 |
| AM2N-1205SH60-NZ | 10.8-13.2 | 5 | 400 | 6000 | 79 |
| AM2N-1209SH60-NZ | 10.8-13.2 | 9 | 222 | 6000 | 80 |
| AM2N-1212SH60-NZ | 10.8-13.2 | 12 | 167 | 6000 | 82 |
| AM2N-1215SH60-NZ | 10.8-13.2 | 15 | 133 | 6000 | 82 |

Models

Dual output

| Model | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|------------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM2N-0505DH60-NZ | 4.5-5.5 | ±5 | ±200 | 6000 | 78 |
| AM2N-0509DH60-NZ | 4.5-5.5 | ±9 | ±110 | 6000 | 79 |
| AM2N-0512DH60-NZ | 4.5-5.5 | ±12 | ±84 | 6000 | 80 |
| AM2N-0515DH60-NZ | 4.5-5.5 | ±15 | ±67 | 6000 | 80 |
| AM2N-1205DH60-NZ | 10.8-13.2 | ±5 | ±200 | 6000 | 79 |
| AM2N-1209DH60-NZ | 10.8-13.2 | ±9 | ±110 | 6000 | 80 |
| AM2N-1212DH60-NZ | 10.8-13.2 | ±12 | ±84 | 6000 | 82 |
| AM2N-1215DH60-NZ | 10.8-13.2 | ±15 | ±67 | 6000 | 82 |

Input Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|---------------|------------|----------------------|---------|-------|
| Voltage range | | 4.5-5.5 10.8-13.2 | | VDC |
| Filter | | Capacitor | | |

Isolation Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|---------------|------------|---------|---------|-------|
| Rated voltage | 60 sec | 6000 | | VDC |
| Resistance | | >1000 | | MOhm |

Output Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|----------------------------------|--------------------|---------------------|---------|--------|
| Voltage accuracy | | See tolerance graph | | |
| Short Circuit protection | 1 sec | | | |
| Line voltage regulation (Single) | For 1.0% of Vin | | ±1.2 | % |
| Line voltage regulation (Dual) | For 1.0% of Vin | | ±1.2 | % |
| Load voltage regulation (Single) | Load 10-100% | | 15 | % |
| Load voltage regulation (Dual) | Load 10-100% | | 15 | % |
| Temperature coefficient | | | ±0.03 | %/°C |
| Ripple & Noise | At 20MHz Bandwidth | | 100 | mV p-p |

General Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|-----------------------|---------------------|---|---------|----------------------|
| Switching frequency | 100% load | 35 | | KHz |
| Operating temperature | Without derating | -40 to +85 | | °C |
| Storage temperature | | -55 to +125 | | °C |
| Case temperature | | | 95 | °C |
| Cooling | Free air convection | | | |
| Humidity | Non condensing | | 90 | % |
| Case material | | Plastic UL94-VO | | |
| Weight | | 16 | | g |
| Dimensions | | 1.27 x 0.58 x 0.37 inches | | 32.3 x 14.7 x 9.4 mm |
| MTBF | | >1 000 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C) | | |

Safety Specifications

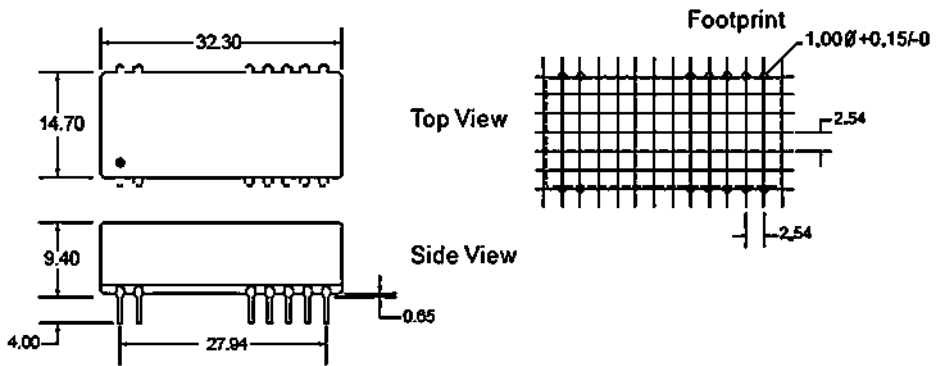
Standards

| | |
|------------------|-------|
| Agency approvals | cULus |
|------------------|-------|

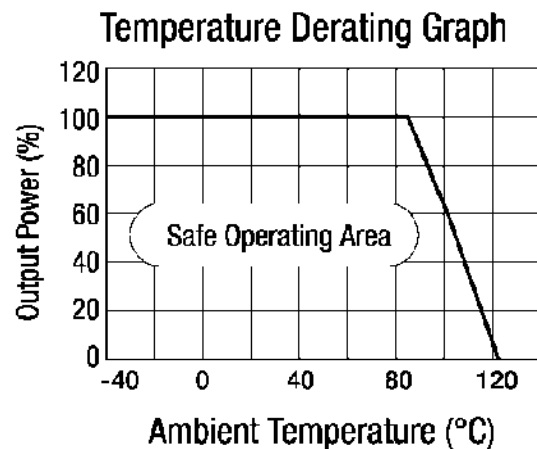
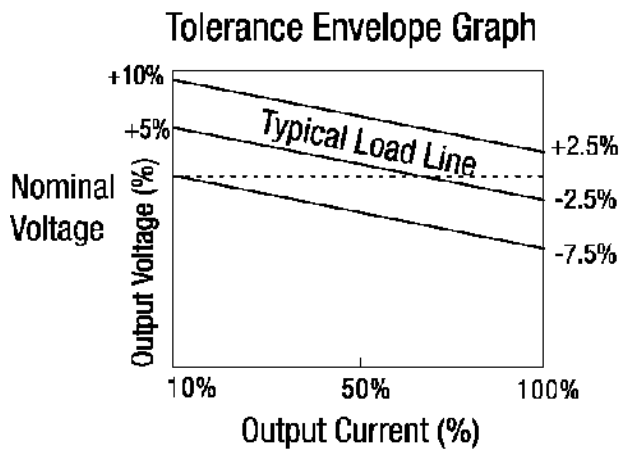
Pin Out Specifications

| Pin | Single | Dual |
|-------|-----------|-----------|
| 1 | +V Input | +V Input |
| 2 | -V Input | -V Input |
| 8,17 | N.C. | -V Output |
| 10,15 | -V Output | Common |
| 12,13 | +V Output | +V Output |

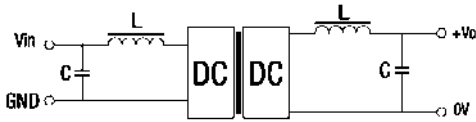
Dimensions



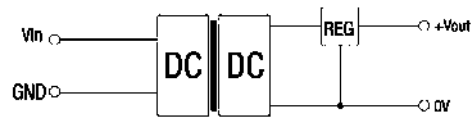
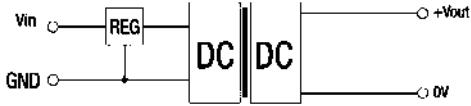
Typical characteristics



Filtering single output

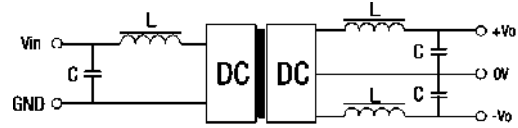


<Figure 1>

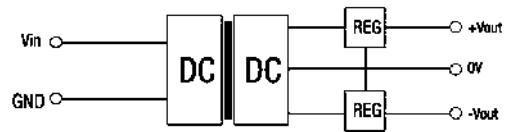
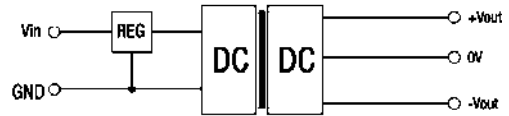


<Figure 2>

Filtering dual output



<Figure 1>



<Figure 2>

External capacitor – Single output

| 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 |

External capacitor – Dual output

| Vin (VDC) | External capacitor (uF) | Vout (VDC) | External capacitor (uF) |
|-----------|-------------------------|------------|-------------------------|
| 5 | 4.7 | 5 | 4.7 |
| 12 | 2.2 | 9 | 2.2 |
| 24 | 1 | 12 | 1 |
| - | - | 15 | 0.47 |