



FEATURES:

- RoHS compliant
- 4 Pin SIP Package
- Low ripple and noise
- High efficiency up to 78%
- Operating temperature -40°C to + 85°C
- Input / Output isolation 1000 and 3000VDC
- Pin compatible with multiple manufacturers

Models
Single output

| Model | Input –Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|--------------------|--------------------|-------------------------|-----------------|----------------|
| AM1S-0503SZ | 4.5-5.5 | 3.3 | 300 | 1000 | 72 |
| AM1S-0505SZ | 4.5-5.5 | 5 | 200 | 1000 | 75 |
| AM1S-0507SZ | 4.5-5.5 | 7.2 | 140 | 1000 | 76 |
| AM1S-0509SZ | 4.5-5.5 | 9 | 110 | 1000 | 77 |
| AM1S-0512SZ | 4.5-5.5 | 12 | 83 | 1000 | 78 |
| AM1S-0515SZ | 4.5-5.5 | 15 | 67 | 1000 | 78 |
| AM1S-0518SZ | 4.5-5.5 | 18 | 56 | 1000 | 78 |
| AM1S-0524SZ | 4.5-5.5 | 24 | 42 | 1000 | 78 |
| AM1S-1203SZ | 10.8-13.2 | 3.3 | 300 | 1000 | 72 |
| AM1S-1205SZ | 10.8-13.2 | 5 | 200 | 1000 | 75 |
| AM1S-1207SZ | 10.8-13.2 | 7.2 | 140 | 1000 | 76 |
| AM1S-1209SZ | 10.8-13.2 | 9 | 110 | 1000 | 77 |
| AM1S-1212SZ | 10.8-13.2 | 12 | 83 | 1000 | 78 |
| AM1S-1215SZ | 10.8-13.2 | 15 | 67 | 1000 | 78 |
| AM1S-1218SZ | 10.8-13.2 | 18 | 56 | 1000 | 78 |
| AM1S-1224SZ | 10.8-13.2 | 24 | 42 | 1000 | 78 |
| AM1S-2403SZ | 21.6-26.4 | 3.3 | 300 | 1000 | 72 |
| AM1S-2405SZ | 21.6-26.4 | 5 | 200 | 1000 | 75 |
| AM1S-2407SZ | 21.6-26.4 | 7.2 | 140 | 1000 | 76 |
| AM1S-2409SZ | 21.6-26.4 | 9 | 110 | 1000 | 77 |
| AM1S-2412SZ | 21.6-26.4 | 12 | 83 | 1000 | 78 |
| AM1S-2415SZ | 21.6-26.4 | 15 | 67 | 1000 | 78 |
| AM1S-2418SZ | 21.6-26.4 | 18 | 56 | 1000 | 78 |
| AM1S-2424SZ | 21.6-26.4 | 24 | 42 | 1000 | 78 |
| AM1S-0503SH30Z | 4.5-5.5 | 3.3 | 300 | 3000 | 72 |
| AM1S-0505SH30Z | 4.5-5.5 | 5 | 200 | 3000 | 75 |
| AM1S-0507SH30Z | 4.5-5.5 | 7.2 | 140 | 3000 | 76 |
| AM1S-0509SH30Z | 4.5-5.5 | 9 | 110 | 3000 | 77 |
| AM1S-0512SH30Z | 4.5-5.5 | 12 | 83 | 3000 | 78 |
| AM1S-0515SH30Z | 4.5-5.5 | 15 | 67 | 3000 | 78 |
| AM1S-0518SH30Z | 4.5-5.5 | 18 | 56 | 3000 | 78 |
| AM1S-0524SH30Z | 4.5-5.5 | 24 | 42 | 3000 | 78 |
| AM1S-1203SH30Z | 10.8-13.2 | 3.3 | 300 | 3000 | 72 |
| AM1S-1205SH30Z | 10.8-13.2 | 5 | 200 | 3000 | 75 |
| AM1S-1207SH30Z | 10.8-13.2 | 7.2 | 140 | 3000 | 76 |
| AM1S-1209SH30Z | 10.8-13.2 | 9 | 110 | 3000 | 77 |
| AM1S-1212SH30Z | 10.8-13.2 | 12 | 83 | 3000 | 78 |
| AM1S-1215SH30Z | 10.8-13.2 | 15 | 67 | 3000 | 78 |
| AM1S-1218SH30Z | 10.8-13.2 | 18 | 56 | 3000 | 78 |
| AM1S-1224SH30Z | 10.8-13.2 | 24 | 42 | 3000 | 78 |
| AM1S-2403SH30Z | 21.6-26.4 | 3.3 | 300 | 3000 | 72 |
| AM1S-2405SH30Z | 21.6-26.4 | 5 | 200 | 3000 | 75 |
| AM1S-2407SH30Z | 21.6-26.4 | 7.2 | 140 | 3000 | 76 |
| AM1S-2409SH30Z | 21.6-26.4 | 9 | 110 | 3000 | 77 |
| AM1S-2412SH30Z | 21.6-26.4 | 12 | 83 | 3000 | 78 |
| AM1S-2415SH30Z | 21.6-26.4 | 15 | 67 | 3000 | 78 |
| AM1S-2418SH30Z | 21.6-26.4 | 18 | 56 | 3000 | 78 |
| AM1S-2424SH30Z | 21.6-26.4 | 24 | 42 | 3000 | 78 |

Input Specifications

| Parameters | Nominal | Typical | Maximum | Units |
|--------------------------------|-----------|-----------|---------|-------|
| Voltage range | 5 | 4.5-5.5 | | VDC |
| | 12 | 10.8-13.2 | | |
| | 24 | 21.6-26.4 | | |
| Filter | Capacitor | | | |
| Turn on Transient process time | | | 25 | ms |
| Start up time | | 200 | | ms |
| Absolute Maximum Rating | 5 Vin | 0-7 | | VDC |
| | 12 Vin | 0-15 | | |
| | 24 Vin | 0-28 | | |
| Peak Input Voltage time | | 100 | | ms |

Isolation Specifications

| Parameters | Conditions | Typical | Rated | Units |
|--------------------|------------|---------|---------------|-------|
| Tested I/O voltage | 3 sec | | 1000 and 3000 | VDC |
| Resistance | | > 1000 | | MOhm |
| Capacitance | | 60 | | pF |

Output Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|---|----------------------|---------|---------|----------|
| Voltage accuracy | | ±3 | | % |
| Short Circuit protection | Momentary (1 sec) | | | |
| Line voltage regulation (Single) | For 1% change of Vin | ±1.2 | | % of Vin |
| Load voltage regulation (Single) | Load 20 – 100% | ±10 | | % |
| Load voltage regulation (Single) 3.3V output model | Load 20 – 100% | ±20 | | % |
| Temperature coefficient | | ±0.02 | | %/°C |
| Ripple & Noise | At 20MHz Bandwidth | 100 | | mV p-p |
| Capacitive load | | | 220 | µF |
| Rising time | | 50 | | ms |

General Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|------------------------|---|-------------|---------|-------|
| Switching frequency | 100% load | 80 | | KHz |
| Operating temperature | Full Load without Derating | -40 to +85 | | °C |
| Storage temperature | | -55 to +125 | | °C |
| Max Case temperature | | | 100 | °C |
| Cooling | Free air convection | | | |
| Humidity | | | 95 | % |
| Case material | Non-conductive black plastic UL94-VO | | | |
| Weight | | 1.8 | | g |
| Dimensions (L x W x H) | 0.46 x 0.24 x 0.38 inches 11.68 x 6.00 x 9.65 mm | | | |
| MTBF | >1 191 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C) | | | |

NOTE: All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

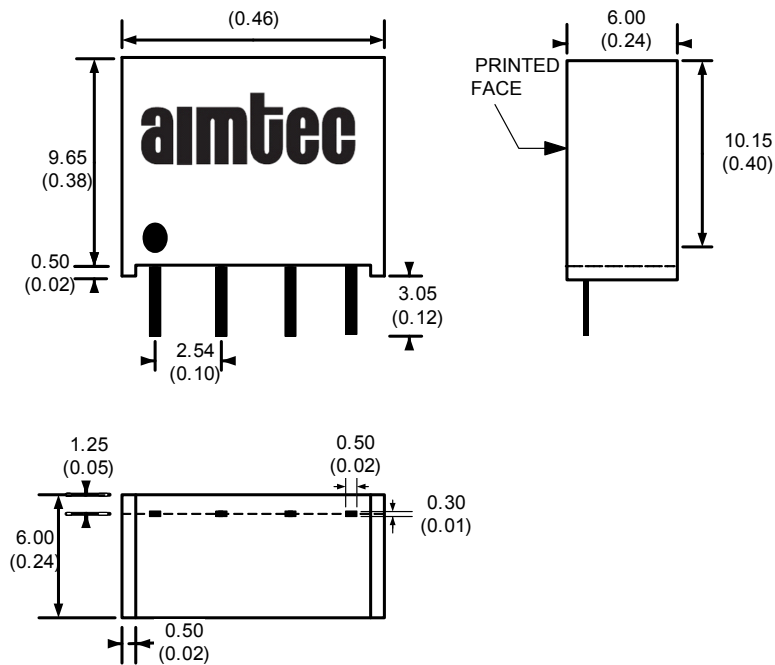
Safety Specifications

| Standards | |
|------------------|---|
| Agency approvals | CE |
| Safety | EN55022 (Radiated Emissions) class B |
| | EN55024 (Noise Immunity), IEC61000-4-2(ESD) |
| | IEC61000-4-3(Radiated immunity) |

Pin Out Specifications

| Pin | Single |
|-----|------------|
| 1 | - V Input |
| 2 | +V Input |
| 3 | - V Output |
| 4 | +V Output |

Dimensions



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