



FEATURES:

- RoHS Compliant
- 4 Pin Smp Package
- Low Ripple And Noise
- High Efficiency up to 81%
- Operating Temperature -40°C to +85°C
- Input / Output Isolation 1000 and 3000VDC
- 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) | Input Current Full Load No Load (mA) | | Max Capacitive Load (µF) | Efficiency (%) |
|-----------------|-------------------|--------------------|-------------------------|-----------------|--|----|--------------------------|----------------|
| AM1SS-0505SZ | 4.5-5.5 | 5 | 200 | 1000 | 267 | 55 | 100 | 75 |
| AM1SS-0512SZ | 4.5-5.5 | 12 | 83.3 | 1000 | 267 | 52 | 100 | 74 |
| AM1SS-0515SZ | 4.5-5.5 | 15 | 66.6 | 1000 | 173 | 50 | 100 | 79 |
| AM1SS-1205SZ | 10.8-13.2 | 5 | 200 | 1000 | 110 | 20 | 100 | 76 |
| AM1SS-1212SZ | 10.8-13.2 | 12 | 83.3 | 1000 | 107 | 23 | 100 | 78 |
| AM1SS-1215SZ | 10.8-13.2 | 15 | 66.6 | 1000 | 111 | 23 | 100 | 79 |
| AM1SS-2405SZ | 21.6-26.4 | 5 | 200 | 1000 | 54 | 15 | 100 | 79 |
| AM1SS-2412SZ | 21.6-26.4 | 12 | 83.3 | 1000 | 56 | 15 | 100 | 75 |
| AM1SS-2415SZ | 21.6-26.4 | 15 | 66.6 | 1000 | 51 | 12 | 100 | 81 |
| AM1SS-0505SH30Z | 4.5-5.5 | 5 | 200 | 3000 | 267 | 55 | 100 | 75 |
| AM1SS-0512SH30Z | 4.5-5.5 | 12 | 83.3 | 3000 | 267 | 52 | 100 | 74 |
| AM1SS-0515SH30Z | 4.5-5.5 | 15 | 66.6 | 3000 | 173 | 50 | 100 | 79 |
| AM1SS-1205SH30Z | 10.8-13.2 | 5 | 200 | 3000 | 110 | 20 | 100 | 76 |
| AM1SS-1212SH30Z | 10.8-13.2 | 12 | 83.3 | 3000 | 107 | 23 | 100 | 78 |
| AM1SS-1215SH30Z | 10.8-13.2 | 15 | 66.6 | 3000 | 111 | 23 | 100 | 79 |
| AM1SS-2405SH30Z | 21.6-26.4 | 5 | 200 | 3000 | 54 | 15 | 100 | 79 |
| AM1SS-2412SH30Z | 21.6-26.4 | 12 | 83.3 | 3000 | 56 | 15 | 100 | 75 |
| AM1SS-2415SH30Z | 21.6-26.4 | 15 | 66.6 | 3000 | 51 | 12 | 100 | 81 |

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.

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 |
| Input reflected Ripple current | with 12µH | | 20 | mA p-p |

Isolation Specifications

| Parameters | Conditions | Typical | Rated | Units |
|--------------------|------------|---------|---------------|-------|
| Tested I/O voltage | 60sec | | 1000 and 3000 | VDC |
| Resistance | | > 1000 | | MOhm |
| Capacitance | | 10 | | pF |

Output Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|--------------------------|------------|---------|---------|-------|
| Voltage accuracy | | ±3 | | % |
| Short Circuit protection | Continuous | | | |

Output Specifications (continued)

| Parameters | Conditions | Typical | Maximum | Units |
|-------------------------|----------------------|---------------|---------|----------|
| Short circuit restart | | Auto-Recovery | | |
| Line voltage regulation | For 1% change of Vin | ±1.2 | | % of Vin |
| Load voltage regulation | Load 20 – 100% | ±10 | | % |
| Temperature coefficient | | ±0.02 | | %/°C |
| Ripple & Noise | At 20MHz Bandwidth | 100 | | mV p-p |
| Capacitive load | | | 100 | µF |
| Rising time | | 50 | | ms |

General Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|------------------------|--|-------------|---------|-------|
| Switching frequency | 100% load , Variable | 80 | | KHz |
| Operating temperature | Full Load without Derating | -40to +85 | | °C |
| Storage temperature | | -40 to +125 | | °C |
| Max Case temperature | | | 100 | °C |
| Cooling | Free air convection | | | |
| Humidity | | | 95 | % |
| Case material | Non-conductive black plastic UL94-VO | | | |
| Weight | | 1.5 | | g |
| Dimensions (L x W x H) | 0.46 x 0.24 x 0.40 inches 11.68 x 6.00 x 10.15 mm | | | |
| MTBF | >1 121 000 hrs(MIL-HDBK -217F, Ground Benign, t=+25°C) | | | |

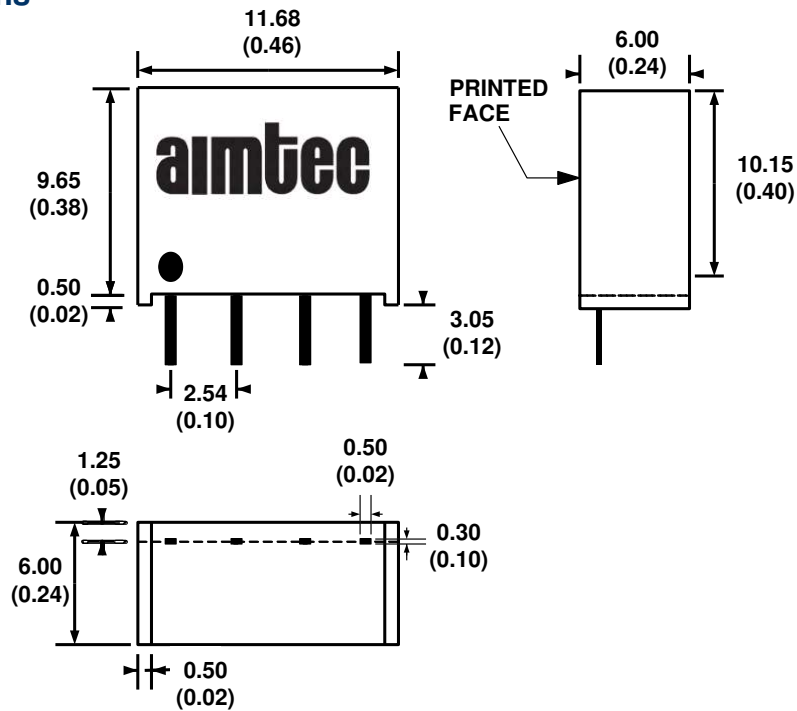
Safety Specifications

Standards

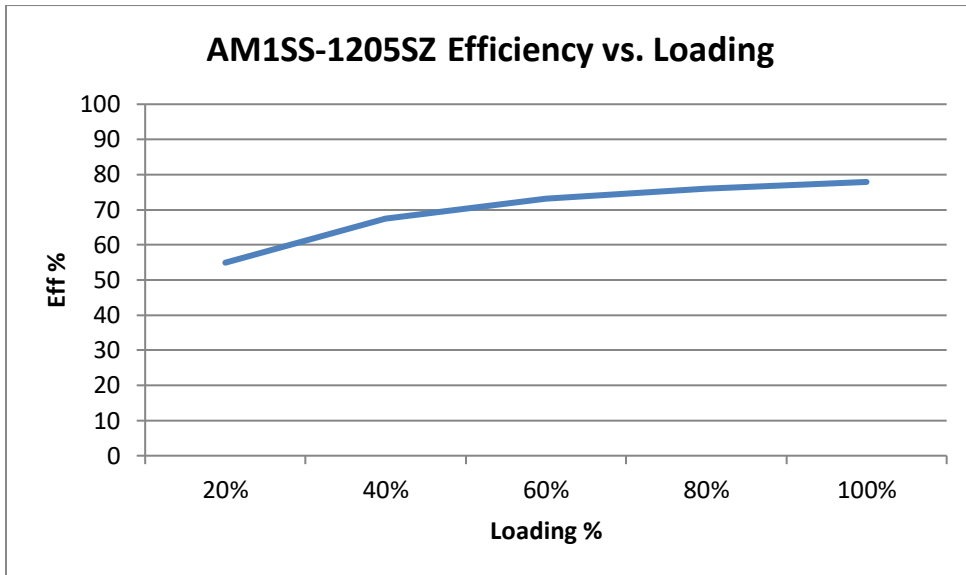
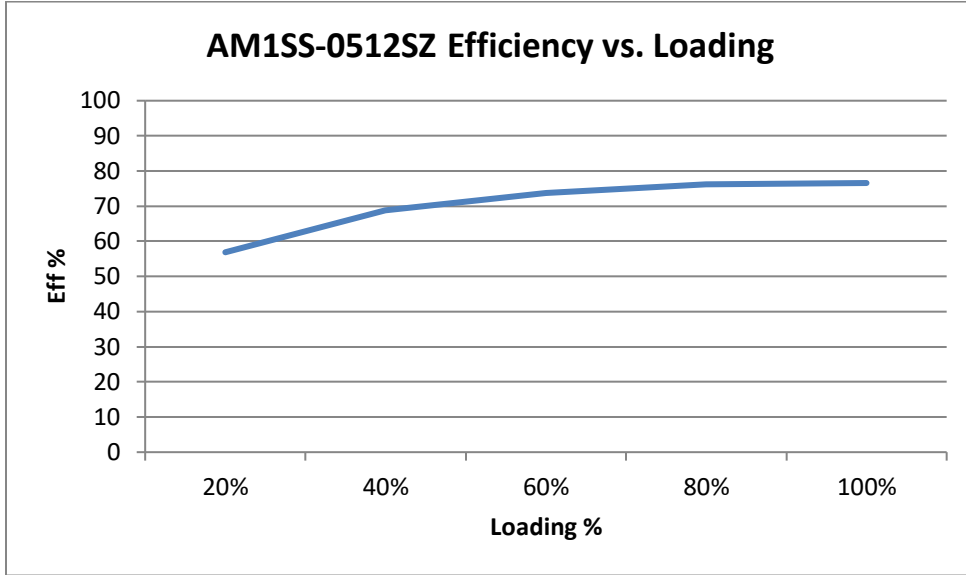
| | |
|--------|--------------------------------|
| Safety | IEC 60950-1 (Designed to meet) |
|--------|--------------------------------|

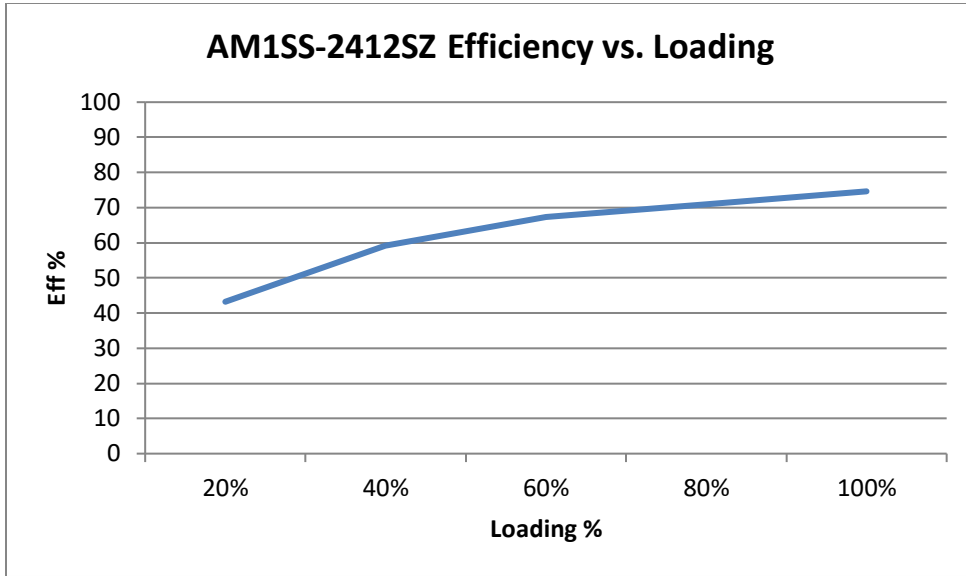
Pin Out Specifications Dimensions

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



Typical Efficiency Example Charts





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