



**FEATURES:**

- RoHS compliant
- High efficiency up to 80%
- Low profile plastic package
- 7 pin SIP package
- Operating temperature -40°C to + 85°C
- Short circuit protection
- Pin compatible with multiple manufacturers
- Input / Output Isolation 1000, 3000, 4000, 5200 & 6000 VDC



**Models**  
**Single output**

| Model          | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency |
|----------------|-------------------|--------------------|-------------------------|-----------------|------------|
| AM1D-0503SZ    | 4.5-5.5           | 3.3                | 300                     | 1000            | 74         |
| AM1D-0505SZ    | 4.5-5.5           | 5                  | 200                     | 1000            | 80         |
| AM1D-0507SZ    | 4.5-5.5           | 7.2                | 140                     | 1000            | 78         |
| AM1D-0509SZ    | 4.5-5.5           | 9                  | 110                     | 1000            | 75         |
| AM1D-0512SZ    | 4.5-5.5           | 12                 | 83                      | 1000            | 77         |
| AM1D-0515SZ    | 4.5-5.5           | 15                 | 70                      | 1000            | 77         |
| AM1D-0518SZ    | 4.5-5.5           | 18                 | 55                      | 1000            | 78         |
| AM1D-0524SZ    | 4.5-5.5           | 24                 | 40                      | 1000            | 75         |
| AM1D-1203SZ    | 10.8-13.2         | 3.3                | 300                     | 1000            | 74         |
| AM1D-1205SZ    | 10.8-13.2         | 5                  | 200                     | 1000            | 79         |
| AM1D-1207SZ    | 10.8-13.2         | 7.2                | 140                     | 1000            | 74         |
| AM1D-1209SZ    | 10.8-13.2         | 9                  | 110                     | 1000            | 75         |
| AM1D-1212SZ    | 10.8-13.2         | 12                 | 83                      | 1000            | 79         |
| AM1D-1215SZ    | 10.8-13.2         | 15                 | 70                      | 1000            | 79         |
| AM1D-1218SZ    | 10.8-13.2         | 18                 | 55                      | 1000            | 78         |
| AM1D-1224SZ    | 10.8-13.2         | 24                 | 40                      | 1000            | 76         |
| AM1D-2403SZ    | 21.6-26.4         | 3.3                | 300                     | 1000            | 65         |
| AM1D-2405SZ    | 21.6-26.4         | 5                  | 200                     | 1000            | 72         |
| AM1D-2407SZ    | 21.6-26.4         | 7.2                | 140                     | 1000            | 76         |
| AM1D-2409SZ    | 21.6-26.4         | 9                  | 110                     | 1000            | 75         |
| AM1D-2412SZ    | 21.6-26.4         | 12                 | 83                      | 1000            | 79         |
| AM1D-2415SZ    | 21.6-26.4         | 15                 | 70                      | 1000            | 79         |
| AM1D-2418SZ    | 21.6-26.4         | 18                 | 55                      | 1000            | 78         |
| AM1D-2424SZ    | 21.6-26.4         | 24                 | 40                      | 1000            | 75         |
| AM1D-0503SH30Z | 4.5-5.5           | 3.3                | 300                     | 3000            | 74         |
| AM1D-0505SH30Z | 4.5-5.5           | 5                  | 200                     | 3000            | 80         |
| AM1D-0507SH30Z | 4.5-5.5           | 7.2                | 140                     | 3000            | 78         |
| AM1D-0509SH30Z | 4.5-5.5           | 9                  | 110                     | 3000            | 75         |
| AM1D-0512SH30Z | 4.5-5.5           | 12                 | 83                      | 3000            | 77         |
| AM1D-0515SH30Z | 4.5-5.5           | 15                 | 70                      | 3000            | 77         |
| AM1D-0518SH30Z | 4.5-5.5           | 18                 | 55                      | 3000            | 78         |
| AM1D-0524SH30Z | 4.5-5.5           | 24                 | 40                      | 3000            | 75         |
| AM1D-1203SH30Z | 10.8-13.2         | 3.3                | 300                     | 3000            | 74         |
| AM1D-1205SH30Z | 10.8-13.2         | 5                  | 200                     | 3000            | 79         |
| AM1D-1207SH30Z | 10.8-13.2         | 7.2                | 140                     | 3000            | 74         |
| AM1D-1209SH30Z | 10.8-13.2         | 9                  | 110                     | 3000            | 76         |
| AM1D-1212SH30Z | 10.8-13.2         | 12                 | 83                      | 3000            | 80         |
| AM1D-1215SH30Z | 10.8-13.2         | 15                 | 70                      | 3000            | 80         |
| AM1D-1218SH30Z | 10.8-13.2         | 18                 | 55                      | 3000            | 78         |
| AM1D-1224SH30Z | 10.8-13.2         | 24                 | 40                      | 3000            | 76         |
| AM1D-2403SH30Z | 21.6-26.4         | 3.3                | 300                     | 3000            | 74         |
| AM1D-2405SH30Z | 21.6-26.4         | 5                  | 200                     | 3000            | 80         |
| AM1D-2407SH30Z | 21.6-26.4         | 7.2                | 140                     | 3000            | 71         |
| AM1D-2409SH30Z | 21.6-26.4         | 9                  | 110                     | 3000            | 75         |

### Models

#### Single output (continued)

| Model          | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM1D-2412SH30Z | 21.6-26.4         | 12                 | 83                      | 3000            | 78             |
| AM1D-2415SH30Z | 21.6-26.4         | 15                 | 70                      | 3000            | 78             |
| AM1D-2418SH30Z | 21.6-26.4         | 18                 | 55                      | 3000            | 78             |
| AM1D-2424SH30Z | 21.6-26.4         | 24                 | 40                      | 3000            | 75             |
| AM1D-0503SH40Z | 4.5-5.5           | 3.3                | 300                     | 4000            | 74             |
| AM1D-0505SH40Z | 4.5-5.5           | 5                  | 200                     | 4000            | 80             |
| AM1D-0507SH40Z | 4.5-5.5           | 7.2                | 140                     | 4000            | 78             |
| AM1D-0509SH40Z | 4.5-5.5           | 9                  | 110                     | 4000            | 75             |
| AM1D-0512SH40Z | 4.5-5.5           | 12                 | 83                      | 4000            | 77             |
| AM1D-0515SH40Z | 4.5-5.5           | 15                 | 70                      | 4000            | 77             |
| AM1D-0518SH40Z | 4.5-5.5           | 18                 | 55                      | 4000            | 78             |
| AM1D-0524SH40Z | 4.5-5.5           | 24                 | 40                      | 4000            | 75             |
| AM1D-1203SH40Z | 10.8-13.2         | 3.3                | 300                     | 4000            | 74             |
| AM1D-1205SH40Z | 10.8-13.2         | 5                  | 200                     | 4000            | 79             |
| AM1D-1207SH40Z | 10.8-13.2         | 7.2                | 140                     | 4000            | 74             |
| AM1D-1209SH40Z | 10.8-13.2         | 9                  | 110                     | 4000            | 75             |
| AM1D-1212SH40Z | 10.8-13.2         | 12                 | 83                      | 4000            | 79             |
| AM1D-1215SH40Z | 10.8-13.2         | 15                 | 70                      | 4000            | 79             |
| AM1D-1218SH40Z | 10.8-13.2         | 18                 | 55                      | 4000            | 78             |
| AM1D-1224SH40Z | 10.8-13.2         | 24                 | 40                      | 4000            | 76             |
| AM1D-2403SH40Z | 21.6-26.4         | 3.3                | 300                     | 4000            | 65             |
| AM1D-2405SH40Z | 21.6-26.4         | 5                  | 200                     | 4000            | 72             |
| AM1D-2407SH40Z | 21.6-26.4         | 7.2                | 140                     | 4000            | 76             |
| AM1D-2409SH40Z | 21.6-26.4         | 9                  | 110                     | 4000            | 75             |
| AM1D-2412SH40Z | 21.6-26.4         | 12                 | 83                      | 4000            | 79             |
| AM1D-2415SH40Z | 21.6-26.4         | 15                 | 70                      | 4000            | 79             |
| AM1D-2418SH40Z | 21.6-26.4         | 18                 | 55                      | 4000            | 78             |
| AM1D-2424SH40Z | 21.6-26.4         | 24                 | 40                      | 4000            | 75             |
| AM1D-0503SH52Z | 4.5-5.5           | 3.3                | 300                     | 5200            | 74             |
| AM1D-0505SH52Z | 4.5-5.5           | 5                  | 200                     | 5200            | 80             |
| AM1D-0507SH52Z | 4.5-5.5           | 7.2                | 140                     | 5200            | 78             |
| AM1D-0509SH52Z | 4.5-5.5           | 9                  | 110                     | 5200            | 75             |
| AM1D-0512SH52Z | 4.5-5.5           | 12                 | 83                      | 5200            | 77             |
| AM1D-0515SH52Z | 4.5-5.5           | 15                 | 70                      | 5200            | 77             |
| AM1D-0518SH52Z | 4.5-5.5           | 18                 | 55                      | 5200            | 78             |
| AM1D-0524SH52Z | 4.5-5.5           | 24                 | 40                      | 5200            | 75             |
| AM1D-1203SH52Z | 10.8-13.2         | 3.3                | 300                     | 5200            | 74             |
| AM1D-1205SH52Z | 10.8-13.2         | 5                  | 200                     | 5200            | 79             |
| AM1D-1207SH52Z | 10.8-13.2         | 7.2                | 140                     | 5200            | 74             |
| AM1D-1209SH52Z | 10.8-13.2         | 9                  | 110                     | 5200            | 76             |
| AM1D-1212SH52Z | 10.8-13.2         | 12                 | 83                      | 5200            | 80             |
| AM1D-1215SH52Z | 10.8-13.2         | 15                 | 70                      | 5200            | 80             |
| AM1D-1218SH52Z | 10.8-13.2         | 18                 | 55                      | 5200            | 78             |
| AM1D-1224SH52Z | 10.8-13.2         | 24                 | 40                      | 5200            | 76             |
| AM1D-2403SH52Z | 21.6-26.4         | 3.3                | 300                     | 5200            | 74             |
| AM1D-2405SH52Z | 21.6-26.4         | 5                  | 200                     | 5200            | 80             |
| AM1D-2407SH52Z | 21.6-26.4         | 7.2                | 140                     | 5200            | 71             |
| AM1D-2409SH52Z | 21.6-26.4         | 9                  | 110                     | 5200            | 75             |
| AM1D-2412SH52Z | 21.6-26.4         | 12                 | 83                      | 5200            | 78             |
| AM1D-2415SH52Z | 21.6-26.4         | 15                 | 70                      | 5200            | 78             |
| AM1D-2418SH52Z | 21.6-26.4         | 18                 | 55                      | 5200            | 78             |
| AM1D-2424SH52Z | 21.6-26.4         | 24                 | 40                      | 5200            | 75             |

### Models

#### Single output (continued)

| Model          | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM1D-0503SH60Z | 4.5-5.5           | 3.3                | 300                     | 6000            | 74             |
| AM1D-0505SH60Z | 4.5-5.5           | 5                  | 200                     | 6000            | 80             |
| AM1D-0507SH60Z | 4.5-5.5           | 7.2                | 140                     | 6000            | 78             |
| AM1D-0509SH60Z | 4.5-5.5           | 9                  | 110                     | 6000            | 75             |
| AM1D-0512SH60Z | 4.5-5.5           | 12                 | 83                      | 6000            | 77             |
| AM1D-0515SH60Z | 4.5-5.5           | 15                 | 70                      | 6000            | 77             |
| AM1D-0518SH60Z | 4.5-5.5           | 18                 | 55                      | 6000            | 78             |
| AM1D-0524SH60Z | 4.5-5.5           | 24                 | 40                      | 6000            | 75             |
| AM1D-1203SH60Z | 10.8-13.2         | 3.3                | 300                     | 6000            | 74             |
| AM1D-1205SH60Z | 10.8-13.2         | 5                  | 200                     | 6000            | 79             |
| AM1D-1207SH60Z | 10.8-13.2         | 7.2                | 140                     | 6000            | 74             |
| AM1D-1209SH60Z | 10.8-13.2         | 9                  | 110                     | 6000            | 76             |
| AM1D-1212SH60Z | 10.8-13.2         | 12                 | 83                      | 6000            | 80             |
| AM1D-1215SH60Z | 10.8-13.2         | 15                 | 70                      | 6000            | 80             |
| AM1D-1218SH60Z | 10.8-13.2         | 18                 | 55                      | 6000            | 78             |
| AM1D-1224SH60Z | 10.8-13.2         | 24                 | 40                      | 6000            | 76             |
| AM1D-2403SH60Z | 21.6-26.4         | 3.3                | 300                     | 6000            | 74             |
| AM1D-2405SH60Z | 21.6-26.4         | 5                  | 200                     | 6000            | 80             |
| AM1D-2407SH60Z | 21.6-26.4         | 7.2                | 140                     | 6000            | 71             |
| AM1D-2409SH60Z | 21.6-26.4         | 9                  | 110                     | 6000            | 75             |
| AM1D-2412SH60Z | 21.6-26.4         | 12                 | 83                      | 6000            | 78             |
| AM1D-2415SH60Z | 21.6-26.4         | 15                 | 70                      | 6000            | 78             |
| AM1D-2418SH60Z | 21.6-26.4         | 18                 | 55                      | 6000            | 78             |
| AM1D-2424SH60Z | 21.6-26.4         | 24                 | 40                      | 6000            | 75             |

### Models

#### Dual output

| Model       | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|-------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM1D-0503DZ | 4.5-5.5           | ±3.3               | ±150                    | 1000            | 72             |
| AM1D-0505DZ | 4.5-5.5           | ±5                 | ±100                    | 1000            | 75             |
| AM1D-0507DZ | 4.5-5.5           | ±7.2               | ±70                     | 1000            | 76             |
| AM1D-0509DZ | 4.5-5.5           | ±9                 | ±55                     | 1000            | 80             |
| AM1D-0512DZ | 4.5-5.5           | ±12                | ±42                     | 1000            | 80             |
| AM1D-0515DZ | 4.5-5.5           | ±15                | ±35                     | 1000            | 79             |
| AM1D-0518DZ | 4.5-5.5           | ±18                | ±27                     | 1000            | 76             |
| AM1D-0524DZ | 4.5-5.5           | ±24                | ±20                     | 1000            | 65             |
| AM1D-1203DZ | 10.8-13.2         | ±3.3               | ±150                    | 1000            | 72             |
| AM1D-1205DZ | 10.8-13.2         | ±5                 | ±100                    | 1000            | 76             |
| AM1D-1207DZ | 10.8-13.2         | ±7.2               | ±70                     | 1000            | 75             |
| AM1D-1209DZ | 10.8-13.2         | ±9                 | ±55                     | 1000            | 79             |
| AM1D-1212DZ | 10.8-13.2         | ±12                | ±42                     | 1000            | 79             |
| AM1D-1215DZ | 10.8-13.2         | ±15                | ±35                     | 1000            | 78             |
| AM1D-1218DZ | 10.8-13.2         | ±18                | ±27                     | 1000            | 75             |
| AM1D-1224DZ | 10.8-13.2         | ±24                | ±20                     | 1000            | 68             |
| AM1D-2403DZ | 21.6-26.4         | ±3.3               | ±150                    | 1000            | 72             |
| AM1D-2405DZ | 21.6-26.4         | ±5                 | ±100                    | 1000            | 76             |
| AM1D-2407DZ | 21.6-26.4         | ±7.2               | ±70                     | 1000            | 74             |
| AM1D-2409DZ | 21.6-26.4         | ±9                 | ±55                     | 1000            | 78             |
| AM1D-2412DZ | 21.6-26.4         | ±12                | ±42                     | 1000            | 78             |
| AM1D-2415DZ | 21.6-26.4         | ±15                | ±35                     | 1000            | 77             |
| AM1D-2418DZ | 21.6-26.4         | ±18                | ±27                     | 1000            | 74             |
| AM1D-2424DZ | 21.6-26.4         | ±24                | ±20                     | 1000            | 65             |

### Models

#### Dual output (continued)

| Model          | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM1D-0503DH30Z | 4.5-5.5           | ±3.3               | ±150                    | 3000            | 72             |
| AM1D-0505DH30Z | 4.5-5.5           | ±5                 | ±100                    | 3000            | 75             |
| AM1D-0507DH30Z | 4.5-5.5           | ±7.2               | ±70                     | 3000            | 76             |
| AM1D-0509DH30Z | 4.5-5.5           | ±9                 | ±55                     | 3000            | 80             |
| AM1D-0512DH30Z | 4.5-5.5           | ±12                | ±42                     | 3000            | 80             |
| AM1D-0515DH30Z | 4.5-5.5           | ±15                | ±35                     | 3000            | 79             |
| AM1D-0518DH30Z | 4.5-5.5           | ±18                | ±27                     | 3000            | 76             |
| AM1D-0524DH30Z | 4.5-5.5           | ±24                | ±20                     | 3000            | 65             |
| AM1D-1203DH30Z | 10.8-13.2         | ±3.3               | ±150                    | 3000            | 72             |
| AM1D-1205DH30Z | 10.8-13.2         | ±5                 | ±100                    | 3000            | 76             |
| AM1D-1207DH30Z | 10.8-13.2         | ±7.2               | ±70                     | 3000            | 75             |
| AM1D-1209DH30Z | 10.8-13.2         | ±9                 | ±55                     | 3000            | 79             |
| AM1D-1212DH30Z | 10.8-13.2         | ±12                | ±42                     | 3000            | 72             |
| AM1D-1215DH30Z | 10.8-13.2         | ±15                | ±35                     | 3000            | 75             |
| AM1D-1218DH30Z | 10.8-13.2         | ±18                | ±27                     | 3000            | 76             |
| AM1D-1224DH30Z | 10.8-13.2         | ±24                | ±20                     | 3000            | 80             |
| AM1D-2403DH30Z | 21.6-26.4         | ±3.3               | ±150                    | 3000            | 80             |
| AM1D-2405DH30Z | 21.6-26.4         | ±5                 | ±100                    | 3000            | 79             |
| AM1D-2407DH30Z | 21.6-26.4         | ±7.2               | ±70                     | 3000            | 76             |
| AM1D-2409DH30Z | 21.6-26.4         | ±9                 | ±55                     | 3000            | 65             |
| AM1D-2412DH30Z | 21.6-26.4         | ±12                | ±42                     | 3000            | 72             |
| AM1D-2415DH30Z | 21.6-26.4         | ±15                | ±35                     | 3000            | 76             |
| AM1D-2418DH30Z | 21.6-26.4         | ±18                | ±27                     | 3000            | 75             |
| AM1D-2424DH30Z | 21.6-26.4         | ±24                | ±20                     | 3000            | 79             |
| AM1D-0503DH40Z | 4.5-5.5           | ±3.3               | ±150                    | 4000            | 79             |
| AM1D-0505DH40Z | 4.5-5.5           | ±5                 | ±100                    | 4000            | 78             |
| AM1D-0507DH40Z | 4.5-5.5           | ±7.2               | ±70                     | 4000            | 75             |
| AM1D-0509DH40Z | 4.5-5.5           | ±9                 | ±55                     | 4000            | 68             |
| AM1D-0512DH40Z | 4.5-5.5           | ±12                | ±42                     | 4000            | 72             |
| AM1D-0515DH40Z | 4.5-5.5           | ±15                | ±35                     | 4000            | 76             |
| AM1D-0518DH40Z | 4.5-5.5           | ±18                | ±27                     | 4000            | 74             |
| AM1D-0524DH40Z | 4.5-5.5           | ±24                | ±20                     | 4000            | 78             |
| AM1D-1203DH40Z | 10.8-13.2         | ±3.3               | ±150                    | 4000            | 78             |
| AM1D-1205DH40Z | 10.8-13.2         | ±5                 | ±100                    | 4000            | 77             |
| AM1D-1207DH40Z | 10.8-13.2         | ±7.2               | ±70                     | 4000            | 74             |
| AM1D-1209DH40Z | 10.8-13.2         | ±9                 | ±55                     | 4000            | 65             |
| AM1D-1212DH40Z | 10.8-13.2         | ±12                | ±42                     | 4000            | 72             |
| AM1D-1215DH40Z | 10.8-13.2         | ±15                | ±35                     | 4000            | 75             |
| AM1D-1218DH40Z | 10.8-13.2         | ±18                | ±27                     | 4000            | 76             |
| AM1D-1224DH40Z | 10.8-13.2         | ±24                | ±20                     | 4000            | 80             |
| AM1D-2403DH40Z | 21.6-26.4         | ±3.3               | ±150                    | 4000            | 80             |
| AM1D-2405DH40Z | 21.6-26.4         | ±5                 | ±100                    | 4000            | 79             |
| AM1D-2407DH40Z | 21.6-26.4         | ±7.2               | ±70                     | 4000            | 76             |
| AM1D-2409DH40Z | 21.6-26.4         | ±9                 | ±55                     | 4000            | 65             |
| AM1D-2412DH40Z | 21.6-26.4         | ±12                | ±42                     | 4000            | 72             |
| AM1D-2415DH40Z | 21.6-26.4         | ±15                | ±35                     | 4000            | 76             |
| AM1D-2418DH40Z | 21.6-26.4         | ±18                | ±27                     | 4000            | 75             |
| AM1D-2424DH40Z | 21.6-26.4         | ±24                | ±20                     | 4000            | 79             |

## Models

### Dual output (continued)

| Model          | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|----------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM1D-0503DH52Z | 4.5-5.5           | ±3.3               | ±150                    | 5200            | 65             |
| AM1D-0505DH52Z | 4.5-5.5           | ±5                 | ±100                    | 5200            | 72             |
| AM1D-0507DH52Z | 4.5-5.5           | ±7.2               | ±70                     | 5200            | 68             |
| AM1D-0509DH52Z | 4.5-5.5           | ±9                 | ±55                     | 5200            | 76             |
| AM1D-0512DH52Z | 4.5-5.5           | ±12                | ±42                     | 5200            | 80             |
| AM1D-0515DH52Z | 4.5-5.5           | ±15                | ±35                     | 5200            | 80             |
| AM1D-0518DH52Z | 4.5-5.5           | ±18                | ±27                     | 5200            | 68             |
| AM1D-0524DH52Z | 4.5-5.5           | ±24                | ±20                     | 5200            | 76             |
| AM1D-1203DH52Z | 10.8-13.2         | ±3.3               | ±150                    | 5200            | 65             |
| AM1D-1205DH52Z | 10.8-13.2         | ±5                 | ±100                    | 5200            | 72             |
| AM1D-1207DH52Z | 10.8-13.2         | ±7.2               | ±70                     | 5200            | 75             |
| AM1D-1209DH52Z | 10.8-13.2         | ±9                 | ±55                     | 5200            | 75             |
| AM1D-1212DH52Z | 10.8-13.2         | ±12                | ±42                     | 5200            | 79             |
| AM1D-1215DH52Z | 10.8-13.2         | ±15                | ±35                     | 5200            | 79             |
| AM1D-1218DH52Z | 10.8-13.2         | ±18                | ±27                     | 5200            | 75             |
| AM1D-1224DH52Z | 10.8-13.2         | ±24                | ±20                     | 5200            | 75             |
| AM1D-2403DH52Z | 21.6-26.4         | ±3.3               | ±150                    | 5200            | 65             |
| AM1D-2405DH52Z | 21.6-26.4         | ±5                 | ±100                    | 5200            | 72             |
| AM1D-2407DH52Z | 21.6-26.4         | ±7.2               | ±70                     | 5200            | 75             |
| AM1D-2409DH52Z | 21.6-26.4         | ±9                 | ±55                     | 5200            | 74             |
| AM1D-2412DH52Z | 21.6-26.4         | ±12                | ±42                     | 5200            | 78             |
| AM1D-2415DH52Z | 21.6-26.4         | ±15                | ±35                     | 5200            | 78             |
| AM1D-2418DH52Z | 21.6-26.4         | ±18                | ±27                     | 5200            | 75             |
| AM1D-2424DH52Z | 21.6-26.4         | ±24                | ±20                     | 5200            | 74             |
| AM1D-0503DH60Z | 4.5-5.5           | ±3.3               | ±150                    | 6000            | 65             |
| AM1D-0505DH60Z | 4.5-5.5           | ±5                 | ±100                    | 6000            | 72             |
| AM1D-0507DH60Z | 4.5-5.5           | ±7.2               | ±70                     | 6000            | 68             |
| AM1D-0509DH60Z | 4.5-5.5           | ±9                 | ±55                     | 6000            | 76             |
| AM1D-0512DH60Z | 4.5-5.5           | ±12                | ±42                     | 6000            | 80             |
| AM1D-0515DH60Z | 4.5-5.5           | ±15                | ±35                     | 6000            | 80             |
| AM1D-0518DH60Z | 4.5-5.5           | ±18                | ±27                     | 6000            | 68             |
| AM1D-0524DH60Z | 4.5-5.5           | ±24                | ±20                     | 6000            | 76             |
| AM1D-1203DH60Z | 10.8-13.2         | ±3.3               | ±150                    | 6000            | 65             |
| AM1D-1205DH60Z | 10.8-13.2         | ±5                 | ±100                    | 6000            | 72             |
| AM1D-1207DH60Z | 10.8-13.2         | ±7.2               | ±70                     | 6000            | 75             |
| AM1D-1209DH60Z | 10.8-13.2         | ±9                 | ±55                     | 6000            | 75             |
| AM1D-1212DH60Z | 10.8-13.2         | ±12                | ±42                     | 6000            | 79             |
| AM1D-1215DH60Z | 10.8-13.2         | ±15                | ±35                     | 6000            | 79             |
| AM1D-1218DH60Z | 10.8-13.2         | ±18                | ±27                     | 6000            | 75             |
| AM1D-1224DH60Z | 10.8-13.2         | ±24                | ±20                     | 6000            | 75             |
| AM1D-2403DH60Z | 21.6-26.4         | ±3.3               | ±150                    | 6000            | 65             |
| AM1D-2405DH60Z | 21.6-26.4         | ±5                 | ±100                    | 6000            | 72             |
| AM1D-2407DH60Z | 21.6-26.4         | ±7.2               | ±70                     | 6000            | 75             |
| AM1D-2409DH60Z | 21.6-26.4         | ±9                 | ±55                     | 6000            | 74             |
| AM1D-2412DH60Z | 21.6-26.4         | ±12                | ±42                     | 6000            | 78             |
| AM1D-2415DH60Z | 21.6-26.4         | ±15                | ±35                     | 6000            | 78             |
| AM1D-2418DH60Z | 21.6-26.4         | ±18                | ±27                     | 6000            | 75             |
| AM1D-2424DH60Z | 21.6-26.4         | ±24                | ±20                     | 6000            | 74             |

### Models

#### Dual separate output

| Model         | Input Voltage (V) | Output Voltage (V) | Output Current max (mA) | Isolation (VDC) | Efficiency (%) |
|---------------|-------------------|--------------------|-------------------------|-----------------|----------------|
| AM1D-050303DZ | 4.5-5.5           | 3.3/3.3            | 150/150                 | 1000            | 75             |
| AM1D-050505DZ | 4.5-5.5           | 5/5                | 100/100                 | 1000            | 72             |
| AM1D-050707DZ | 4.5-5.5           | 7.2/7.2            | 70/70                   | 1000            | 73             |
| AM1D-050909DZ | 4.5-5.5           | 9/9                | 55/55                   | 1000            | 75             |
| AM1D-051212DZ | 4.5-5.5           | 12/12              | 42/42                   | 1000            | 80             |
| AM1D-051515DZ | 4.5-5.5           | 15/15              | 35 /35                  | 1000            | 78             |
| AM1D-051818DZ | 4.5-5.5           | 18/18              | 27/27                   | 1000            | 77             |
| AM1D-052424DZ | 4.5-5.5           | 24/24              | 20/20                   | 1000            | 77             |
| AM1D-120303DZ | 10.8-13.2         | 3.3/3.3            | 150/150                 | 1000            | 66             |
| AM1D-120505DZ | 10.8-13.2         | 5/5                | 100/100                 | 1000            | 72             |
| AM1D-120707DZ | 10.8-13.2         | 7.2/7.2            | 70/70                   | 1000            | 66             |
| AM1D-120909DZ | 10.8-13.2         | 9/9                | 55/55                   | 1000            | 75             |
| AM1D-121212DZ | 10.8-13.2         | 12/12              | 42/42                   | 1000            | 78             |
| AM1D-121515DZ | 10.8-13.2         | 15/15              | 35 /35                  | 1000            | 80             |
| AM1D-121818DZ | 10.8-13.2         | 18/18              | 27/27                   | 1000            | 75             |
| AM1D-122424DZ | 10.8-13.2         | 24/24              | 20/20                   | 1000            | 72             |
| AM1D-240303DZ | 21.6-26.4         | 3.3/3.3            | 150/150                 | 1000            | 66             |
| AM1D-240505DZ | 21.6-26.4         | 5/5                | 100/100                 | 1000            | 72             |
| AM1D-240707DZ | 21.6-26.4         | 7.2/7.2            | 70/70                   | 1000            | 72             |
| AM1D-240909DZ | 21.6-26.4         | 9/9                | 55/55                   | 1000            | 78             |
| AM1D-241212DZ | 21.6-26.4         | 12/12              | 42/42                   | 1000            | 80             |
| AM1D-241515DZ | 21.6-26.4         | 15/15              | 35 /35                  | 1000            | 77             |
| AM1D-241818DZ | 21.6-26.4         | 18/18              | 27/27                   | 1000            | 75             |
| AM1D-242424DZ | 21.6-26.4         | 24/24              | 20/20                   | 1000            | 73             |

NOTE: All specifications in this datasheet 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    |

### Isolation Specifications

| Parameters         | Conditions | Typical | Rated                                                      | Units |
|--------------------|------------|---------|------------------------------------------------------------|-------|
| Tested I/O voltage | 3 sec      |         | 1000 (all models), 3000, 4000, 5200 & 6000 (single / dual) | VDC   |
| Resistance         |            | > 1000  |                                                            | MOhm  |
| Capacitance        |            | 60      |                                                            | pF    |

### Output Specifications

| Parameters                          | Conditions    | Typical           | Maximum | Units |
|-------------------------------------|---------------|-------------------|---------|-------|
| Voltage accuracy                    |               | ±3                |         | %     |
| Voltage balance (Dual Output model) | Balanced Load | ±1                |         | %     |
| Short Circuit protection            |               | Momentary (1 sec) |         |       |

### Output Specifications (continued)

| Parameters                                            | Conditions         | Typical | Maximum | Units  |
|-------------------------------------------------------|--------------------|---------|---------|--------|
| 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 20~100%       | ±10     |         | %      |
| Load voltage regulation (Single)<br>3.3V output model | load 20~100%       | ±20     |         | %      |
| Load voltage regulation (Dual)                        | load 20~100%       | ±10     |         | %      |
| Temperature coefficient                               |                    | ±0.02   |         | %/°C   |
| Ripple & Noise                                        | At 20MHz Bandwidth | 75      |         | mV p-p |
| 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   |                                                         |                         | +95                    | °C    |
| Cooling                | Free air convection                                     |                         |                        |       |
| Humidity               |                                                         |                         | 90                     | %     |
| Case material          | Non-conductive black plastic UL 94 V-0                  |                         |                        |       |
| Weight                 |                                                         | 2.3                     |                        | g     |
| Dimensions (L x W x H) |                                                         | 0.76 x 0.24 x 0.37 inch | 19.50 x 6.00 x 9.50 mm |       |
| MTBF                   | >2 000 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C) |                         |                        |       |

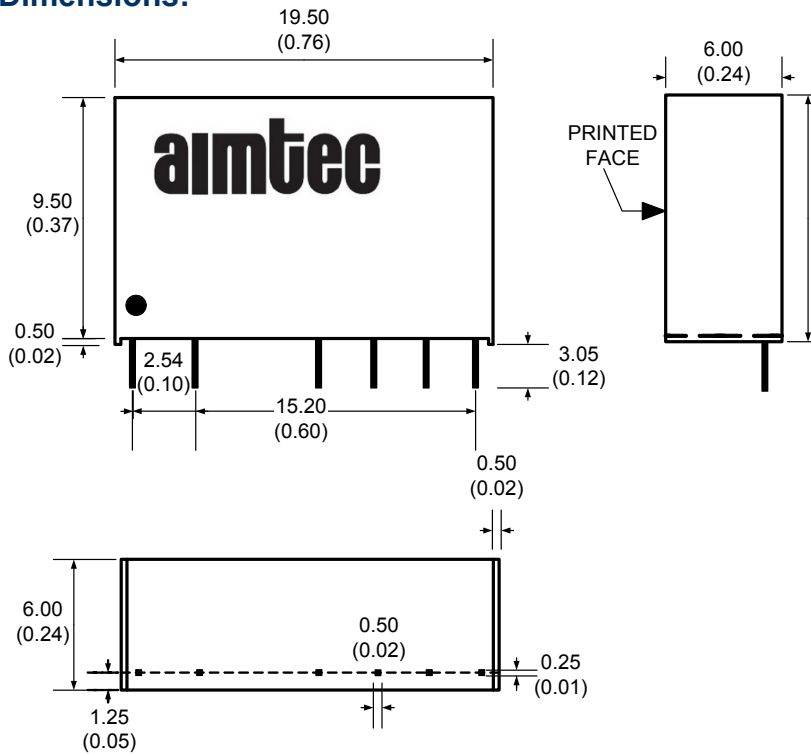
### Safety Specifications

| Standards        |                                              |
|------------------|----------------------------------------------|
| Agency approvals | CE (with exception of dual separated models) |
| Safety           | EN55022 (Radiated Emissions) class B         |
|                  | EN55024 (Noise Immunity)                     |
|                  | IEC61000-4-2(ESD)                            |
|                  | IEC61000-4-3(Radiated immunity)              |

### Pin Out Specifications

| Pin | Single<br>1000 VDC | Dual<br>1000 VDC | Dual Separated<br>1000 VDC | Single<br>3000, 4000, 5200 & 6000 VDC | Dual<br>3000, 4000, 5200 & 6000 VDC |
|-----|--------------------|------------------|----------------------------|---------------------------------------|-------------------------------------|
| 1   | + V Input          | + V Input        | +V Input                   | + V Input                             | + V Input                           |
| 2   | - V Input          | - V Input        | -V Input                   | - V Input                             | - V Input                           |
| 4   | - V Output         | - V Output       | +V1 Output                 | No pin                                | No pin                              |
| 5   | No pin             | Common           | -V1 Output                 | - V Output                            | - V Output                          |
| 6   | + V Output         | + V Output       | +V2 Output                 | No pin                                | Common                              |
| 7   | No pin             | No pin           | -V2 Output                 | + V Output                            | + V Output                          |

**Dimensions:**



**NOTE:** 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to [www.aimtec.com](http://www.aimtec.com) for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at [www.aimtec.com](http://www.aimtec.com).