

**FEATURES:**

- RoHS compliant
- High efficiency up to 76%
- Low profile plastic package
- 7 pin SIP package
- Operating temperature -40°C to +85°C
- Continuous Short circuit protection
- Pin compatible with multiple manufacturers
- Input / Output Isolation 1000 to 6000 VDC



### 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 (uF) | Efficiency % |
|-----------------|-------------------|--------------------|-------------------------|-----------------|----------------------------------------|----|--------------------------|--------------|
| AM1DS-0505SZ    | 4.5-5.5           | 5                  | 200                     | 1000            | 278                                    | 60 | 220                      | 72           |
| AM1DS-0507SZ    | 4.5-5.5           | 7.2                | 139                     | 1000            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0509SZ    | 4.5-5.5           | 9                  | 111                     | 1000            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0512SZ    | 4.5-5.5           | 12                 | 83                      | 1000            | 274                                    | 53 | 220                      | 73           |
| AM1DS-0515SZ    | 4.5-5.5           | 15                 | 67                      | 1000            | 270                                    | 60 | 220                      | 74           |
| AM1DS-0518SZ    | 4.5-5.5           | 18                 | 56                      | 1000            | 270                                    | 60 | 220                      | 74           |
| AM1DS-0524SZ    | 4.5-5.5           | 24                 | 42                      | 1000            | 266                                    | 60 | 220                      | 75           |
| AM1DS-1205SZ    | 10.8-13.2         | 5                  | 200                     | 1000            | 113                                    | 20 | 220                      | 74           |
| AM1DS-1207SZ    | 10.8-13.2         | 7.2                | 139                     | 1000            | 115                                    | 30 | 220                      | 72           |
| AM1DS-1209SZ    | 10.8-13.2         | 9                  | 111                     | 1000            | 114                                    | 30 | 220                      | 73           |
| AM1DS-1212SZ    | 10.8-13.2         | 12                 | 83                      | 1000            | 110                                    | 25 | 220                      | 76           |
| AM1DS-1215SZ    | 10.8-13.2         | 15                 | 67                      | 1000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1218SZ    | 10.8-13.2         | 18                 | 56                      | 1000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1224SZ    | 10.8-13.2         | 24                 | 42                      | 1000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-2405SZ    | 21.6-26.4         | 5                  | 200                     | 1000            | 60                                     | 15 | 220                      | 69           |
| AM1DS-2407SZ    | 21.6-26.4         | 7.2                | 139                     | 1000            | 57                                     | 10 | 220                      | 73           |
| AM1DS-2409SZ    | 21.6-26.4         | 9                  | 111                     | 1000            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2412SZ    | 21.6-26.4         | 12                 | 83                      | 1000            | 62                                     | 15 | 220                      | 67           |
| AM1DS-2415SZ    | 21.6-26.4         | 15                 | 67                      | 1000            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2418SZ    | 21.6-26.4         | 18                 | 56                      | 1000            | 54                                     | 10 | 220                      | 76           |
| AM1DS-2424SZ    | 21.6-26.4         | 24                 | 42                      | 1000            | 54                                     | 10 | 220                      | 76           |
| AM1DS-0505SH30Z | 4.5-5.5           | 5                  | 200                     | 3000            | 278                                    | 60 | 220                      | 72           |
| AM1DS-0507SH30Z | 4.5-5.5           | 7.2                | 139                     | 3000            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0509SH30Z | 4.5-5.5           | 9                  | 111                     | 3000            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0512SH30Z | 4.5-5.5           | 12                 | 83                      | 3000            | 274                                    | 53 | 220                      | 73           |
| AM1DS-0515SH30Z | 4.5-5.5           | 15                 | 67                      | 3000            | 270                                    | 60 | 220                      | 74           |
| AM1DS-0518SH30Z | 4.5-5.5           | 18                 | 56                      | 3000            | 270                                    | 60 | 220                      | 74           |
| AM1DS-0524SH30Z | 4.5-5.5           | 24                 | 42                      | 3000            | 266                                    | 60 | 220                      | 75           |
| AM1DS-1205SH30Z | 10.8-13.2         | 5                  | 200                     | 3000            | 113                                    | 20 | 220                      | 74           |
| AM1DS-1207SH30Z | 10.8-13.2         | 7.2                | 139                     | 3000            | 115                                    | 30 | 220                      | 72           |
| AM1DS-1209SH30Z | 10.8-13.2         | 9                  | 111                     | 3000            | 114                                    | 30 | 220                      | 73           |
| AM1DS-1212SH30Z | 10.8-13.2         | 12                 | 83                      | 3000            | 110                                    | 25 | 220                      | 76           |
| AM1DS-1215SH30Z | 10.8-13.2         | 15                 | 67                      | 3000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1218SH30Z | 10.8-13.2         | 18                 | 56                      | 3000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1224SH30Z | 10.8-13.2         | 24                 | 42                      | 3000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-2405SH30Z | 21.6-26.4         | 5                  | 200                     | 3000            | 60                                     | 15 | 220                      | 69           |
| AM1DS-2407SH30Z | 21.6-26.4         | 7.2                | 139                     | 3000            | 57                                     | 10 | 220                      | 73           |
| AM1DS-2409SH30Z | 21.6-26.4         | 9                  | 111                     | 3000            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2412SH30Z | 21.6-26.4         | 12                 | 83                      | 3000            | 62                                     | 15 | 220                      | 67           |
| AM1DS-2415SH30Z | 21.6-26.4         | 15                 | 67                      | 3000            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2418SH30Z | 21.6-26.4         | 18                 | 56                      | 3000            | 54                                     | 10 | 220                      | 76           |
| AM1DS-2424SH30Z | 21.6-26.4         | 24                 | 42                      | 3000            | 54                                     | 10 | 220                      | 76           |
| AM1DS-0505SH40Z | 4.5-5.5           | 5                  | 200                     | 4000            | 278                                    | 60 | 220                      | 72           |
| AM1DS-0507SH40Z | 4.5-5.5           | 7.2                | 139                     | 4000            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0509SH40Z | 4.5-5.5           | 9                  | 111                     | 4000            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0512SH40Z | 4.5-5.5           | 12                 | 83                      | 4000            | 274                                    | 53 | 220                      | 73           |
| AM1DS-0515SH40Z | 4.5-5.5           | 15                 | 67                      | 4000            | 270                                    | 60 | 220                      | 74           |

### Models

#### Single output (continued)

| Model           | Input Voltage (V) | Output Voltage (V) | Output Current Max (mA) | Isolation (VDC) | Input Current Full Load   No Load (mA) |    | Max Capacitive Load (uF) | Efficiency % |
|-----------------|-------------------|--------------------|-------------------------|-----------------|----------------------------------------|----|--------------------------|--------------|
| AM1DS-0518SH40Z | 4.5-5.5           | 18                 | 56                      | 4000            | 270                                    | 60 | 220                      | 74           |
| AM1DS-0524SH40Z | 4.5-5.5           | 24                 | 42                      | 4000            | 266                                    | 60 | 220                      | 75           |
| AM1DS-1205SH40Z | 10.8-13.2         | 5                  | 200                     | 4000            | 113                                    | 20 | 220                      | 74           |
| AM1DS-1207SH40Z | 10.8-13.2         | 7.2                | 139                     | 4000            | 115                                    | 30 | 220                      | 72           |
| AM1DS-1209SH40Z | 10.8-13.2         | 9                  | 111                     | 4000            | 114                                    | 30 | 220                      | 73           |
| AM1DS-1212SH40Z | 10.8-13.2         | 12                 | 83                      | 4000            | 110                                    | 25 | 220                      | 76           |
| AM1DS-1215SH40Z | 10.8-13.2         | 15                 | 67                      | 4000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1218SH40Z | 10.8-13.2         | 18                 | 56                      | 4000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1224SH40Z | 10.8-13.2         | 24                 | 42                      | 4000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-2405SH40Z | 21.6-26.4         | 5                  | 200                     | 4000            | 60                                     | 15 | 220                      | 69           |
| AM1DS-2407SH40Z | 21.6-26.4         | 7.2                | 139                     | 4000            | 57                                     | 10 | 220                      | 73           |
| AM1DS-2409SH40Z | 21.6-26.4         | 9                  | 111                     | 4000            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2412SH40Z | 21.6-26.4         | 12                 | 83                      | 4000            | 62                                     | 15 | 220                      | 67           |
| AM1DS-2415SH40Z | 21.6-26.4         | 15                 | 67                      | 4000            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2418SH40Z | 21.6-26.4         | 18                 | 56                      | 4000            | 54                                     | 10 | 220                      | 76           |
| AM1DS-2424SH40Z | 21.6-26.4         | 24                 | 42                      | 4000            | 54                                     | 10 | 220                      | 76           |
| AM1DS-0505SH52Z | 4.5-5.5           | 5                  | 200                     | 5200            | 278                                    | 60 | 220                      | 72           |
| AM1DS-0507SH52Z | 4.5-5.5           | 7.2                | 139                     | 5200            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0509SH52Z | 4.5-5.5           | 9                  | 111                     | 5200            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0512SH52Z | 4.5-5.5           | 12                 | 83                      | 5200            | 274                                    | 53 | 220                      | 73           |
| AM1DS-0515SH52Z | 4.5-5.5           | 15                 | 67                      | 5200            | 270                                    | 60 | 220                      | 74           |
| AM1DS-0518SH52Z | 4.5-5.5           | 18                 | 56                      | 5200            | 270                                    | 60 | 220                      | 74           |
| AM1DS-0524SH52Z | 4.5-5.5           | 24                 | 42                      | 5200            | 266                                    | 60 | 220                      | 75           |
| AM1DS-1205SH52Z | 10.8-13.2         | 5                  | 200                     | 5200            | 113                                    | 20 | 220                      | 74           |
| AM1DS-1207SH52Z | 10.8-13.2         | 7.2                | 139                     | 5200            | 115                                    | 30 | 220                      | 72           |
| AM1DS-1209SH52Z | 10.8-13.2         | 9                  | 111                     | 5200            | 114                                    | 30 | 220                      | 73           |
| AM1DS-1212SH52Z | 10.8-13.2         | 12                 | 83                      | 5200            | 110                                    | 25 | 220                      | 76           |
| AM1DS-1215SH52Z | 10.8-13.2         | 15                 | 67                      | 5200            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1218SH52Z | 10.8-13.2         | 18                 | 56                      | 5200            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1224SH52Z | 10.8-13.2         | 24                 | 42                      | 5200            | 111                                    | 30 | 220                      | 75           |
| AM1DS-2405SH52Z | 21.6-26.4         | 5                  | 200                     | 5200            | 60                                     | 15 | 220                      | 69           |
| AM1DS-2407SH52Z | 21.6-26.4         | 7.2                | 139                     | 5200            | 57                                     | 10 | 220                      | 73           |
| AM1DS-2409SH52Z | 21.6-26.4         | 9                  | 111                     | 5200            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2412SH52Z | 21.6-26.4         | 12                 | 83                      | 5200            | 62                                     | 15 | 220                      | 67           |
| AM1DS-2415SH52Z | 21.6-26.4         | 15                 | 67                      | 5200            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2418SH52Z | 21.6-26.4         | 18                 | 56                      | 5200            | 54                                     | 10 | 220                      | 76           |
| AM1DS-2424SH52Z | 21.6-26.4         | 24                 | 42                      | 5200            | 54                                     | 10 | 220                      | 76           |
| AM1DS-0505SH60Z | 4.5-5.5           | 5                  | 200                     | 6000            | 278                                    | 60 | 220                      | 72           |
| AM1DS-0507SH60Z | 4.5-5.5           | 7.2                | 139                     | 6000            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0509SH60Z | 4.5-5.5           | 9                  | 111                     | 6000            | 277                                    | 60 | 220                      | 72           |
| AM1DS-0512SH60Z | 4.5-5.5           | 12                 | 83                      | 6000            | 274                                    | 53 | 220                      | 73           |
| AM1DS-0515SH60Z | 4.5-5.5           | 15                 | 67                      | 6000            | 270                                    | 60 | 220                      | 74           |
| AM1DS-0518SH60Z | 4.5-5.5           | 18                 | 56                      | 6000            | 270                                    | 60 | 220                      | 74           |
| AM1DS-0524SH60Z | 4.5-5.5           | 24                 | 42                      | 6000            | 266                                    | 60 | 220                      | 75           |
| AM1DS-1205SH60Z | 10.8-13.2         | 5                  | 200                     | 6000            | 113                                    | 20 | 220                      | 74           |
| AM1DS-1207SH60Z | 10.8-13.2         | 7.2                | 139                     | 6000            | 115                                    | 30 | 220                      | 72           |
| AM1DS-1209SH60Z | 10.8-13.2         | 9                  | 111                     | 6000            | 114                                    | 30 | 220                      | 73           |
| AM1DS-1212SH60Z | 10.8-13.2         | 12                 | 83                      | 6000            | 110                                    | 25 | 220                      | 76           |
| AM1DS-1215SH60Z | 10.8-13.2         | 15                 | 67                      | 6000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1218SH60Z | 10.8-13.2         | 18                 | 56                      | 6000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-1224SH60Z | 10.8-13.2         | 24                 | 42                      | 6000            | 111                                    | 30 | 220                      | 75           |
| AM1DS-2405SH60Z | 21.6-26.4         | 5                  | 200                     | 6000            | 60                                     | 15 | 220                      | 69           |
| AM1DS-2407SH60Z | 21.6-26.4         | 7.2                | 139                     | 6000            | 57                                     | 10 | 220                      | 73           |

### Models

#### Single output (continued)

| Model           | Input Voltage (V) | Output Voltage (V) | Output Current Max (mA) | Isolation (VDC) | Input Current Full Load   No Load (mA) |    | Max Capacitive Load (uF) | Efficiency % |
|-----------------|-------------------|--------------------|-------------------------|-----------------|----------------------------------------|----|--------------------------|--------------|
| AM1DS-2409SH60Z | 21.6-26.4         | 9                  | 111                     | 6000            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2412SH60Z | 21.6-26.4         | 12                 | 83                      | 6000            | 62                                     | 15 | 220                      | 67           |
| AM1DS-2415SH60Z | 21.6-26.4         | 15                 | 67                      | 6000            | 55                                     | 10 | 220                      | 75           |
| AM1DS-2418SH60Z | 21.6-26.4         | 18                 | 56                      | 6000            | 54                                     | 10 | 220                      | 76           |
| AM1DS-2424SH60Z | 21.6-26.4         | 24                 | 42                      | 6000            | 54                                     | 10 | 220                      | 76           |

### Models

#### Dual output

| Model           | Input Voltage (V) | Output Voltage (V) | Output Current Max (mA) | Isolation (VDC) | Input Current Full Load   No Load (mA) |    | Max Capacitive Load (uF) | Efficiency (%) |
|-----------------|-------------------|--------------------|-------------------------|-----------------|----------------------------------------|----|--------------------------|----------------|
| AM1DS-0505DZ    | 4.5-5.5           | ±5                 | ±100                    | 1000            | 308                                    | 55 | ±100                     | 65             |
| AM1DS-0507DZ    | 4.5-5.5           | ±7.2               | ±70                     | 1000            | 285                                    | 60 | ±100                     | 70             |
| AM1DS-0509DZ    | 4.5-5.5           | ±9                 | ±56                     | 1000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0512DZ    | 4.5-5.5           | ±12                | ±42                     | 1000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0515DZ    | 4.5-5.5           | ±15                | ±33                     | 1000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-1205DZ    | 10.8-13.2         | ±5                 | ±100                    | 1000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1207DZ    | 10.8-13.2         | ±7.2               | ±70                     | 1000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1209DZ    | 10.8-13.2         | ±9                 | ±56                     | 1000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1212DZ    | 10.8-13.2         | ±12                | ±42                     | 1000            | 109                                    | 20 | ±100                     | 76             |
| AM1DS-1215DZ    | 10.8-13.2         | ±15                | ±33                     | 1000            | 109                                    | 30 | ±100                     | 76             |
| AM1DS-2405DZ    | 21.6-26.4         | ±5                 | ±100                    | 1000            | 59                                     | 13 | ±100                     | 71             |
| AM1DS-2407DZ    | 21.6-26.4         | ±7.2               | ±70                     | 1000            | 57                                     | 10 | ±100                     | 72             |
| AM1DS-2409DZ    | 21.6-26.4         | ±9                 | ±56                     | 1000            | 57                                     | 10 | ±100                     | 73             |
| AM1DS-2412DZ    | 21.6-26.4         | ±12                | ±42                     | 1000            | 58                                     | 17 | ±100                     | 72             |
| AM1DS-2415DZ    | 21.6-26.4         | ±15                | ±33                     | 1000            | 54                                     | 10 | ±100                     | 76             |
| AM1DS-0505DH30Z | 4.5-5.5           | ±5                 | ±100                    | 3000            | 308                                    | 55 | ±100                     | 65             |
| AM1DS-0507DH30Z | 4.5-5.5           | ±7.2               | ±70                     | 3000            | 285                                    | 60 | ±100                     | 70             |
| AM1DS-0509DH30Z | 4.5-5.5           | ±9                 | ±56                     | 3000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0512DH30Z | 4.5-5.5           | ±12                | ±42                     | 3000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0515DH30Z | 4.5-5.5           | ±15                | ±33                     | 3000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-1205DH30Z | 10.8-13.2         | ±5                 | ±100                    | 3000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1207DH30Z | 10.8-13.2         | ±7.2               | ±70                     | 3000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1209DH30Z | 10.8-13.2         | ±9                 | ±56                     | 3000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1212DH30Z | 10.8-13.2         | ±12                | ±42                     | 3000            | 109                                    | 20 | ±100                     | 76             |
| AM1DS-1215DH30Z | 10.8-13.2         | ±15                | ±33                     | 3000            | 109                                    | 30 | ±100                     | 76             |
| AM1DS-2405DH30Z | 21.6-26.4         | ±5                 | ±100                    | 3000            | 59                                     | 13 | ±100                     | 71             |
| AM1DS-2407DH30Z | 21.6-26.4         | ±7.2               | ±70                     | 3000            | 57                                     | 10 | ±100                     | 72             |
| AM1DS-2409DH30Z | 21.6-26.4         | ±9                 | ±56                     | 3000            | 57                                     | 10 | ±100                     | 73             |
| AM1DS-2412DH30Z | 21.6-26.4         | ±12                | ±42                     | 3000            | 58                                     | 17 | ±100                     | 72             |
| AM1DS-2415DH30Z | 21.6-26.4         | ±15                | ±33                     | 3000            | 54                                     | 10 | ±100                     | 76             |
| AM1DS-0505DH40Z | 4.5-5.5           | ±5                 | ±100                    | 4000            | 308                                    | 55 | ±100                     | 65             |
| AM1DS-0507DH40Z | 4.5-5.5           | ±7.2               | ±70                     | 4000            | 285                                    | 60 | ±100                     | 70             |
| AM1DS-0509DH40Z | 4.5-5.5           | ±9                 | ±56                     | 4000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0512DH40Z | 4.5-5.5           | ±12                | ±42                     | 4000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0515DH40Z | 4.5-5.5           | ±15                | ±33                     | 4000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-1205DH40Z | 10.8-13.2         | ±5                 | ±100                    | 4000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1207DH40Z | 10.8-13.2         | ±7.2               | ±70                     | 4000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1209DH40Z | 10.8-13.2         | ±9                 | ±56                     | 4000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1212DH40Z | 10.8-13.2         | ±12                | ±42                     | 4000            | 109                                    | 20 | ±100                     | 76             |
| AM1DS-1215DH40Z | 10.8-13.2         | ±15                | ±33                     | 4000            | 109                                    | 30 | ±100                     | 76             |
| AM1DS-2405DH40Z | 21.6-26.4         | ±5                 | ±100                    | 4000            | 59                                     | 13 | ±100                     | 71             |
| AM1DS-2407DH40Z | 21.6-26.4         | ±7.2               | ±70                     | 4000            | 57                                     | 10 | ±100                     | 72             |

### Models

#### Dual output (continued)

| Model           | Input Voltage (V) | Output Voltage (V) | Output Current Max (mA) | Isolation (VDC) | Input Current Full Load   No Load (mA) |    | Max Capacitive Load (uF) | Efficiency (%) |
|-----------------|-------------------|--------------------|-------------------------|-----------------|----------------------------------------|----|--------------------------|----------------|
| AM1DS-2409DH40Z | 21.6-26.4         | ±9                 | ±56                     | 4000            | 57                                     | 10 | ±100                     | 73             |
| AM1DS-2412DH40Z | 21.6-26.4         | ±12                | ±42                     | 4000            | 58                                     | 17 | ±100                     | 72             |
| AM1DS-2415DH40Z | 21.6-26.4         | ±15                | ±33                     | 4000            | 54                                     | 10 | ±100                     | 76             |
| AM1DS-0505DH52Z | 4.5-5.5           | ±5                 | ±100                    | 5200            | 308                                    | 55 | ±100                     | 65             |
| AM1DS-0507DH52Z | 4.5-5.5           | ±7.2               | ±70                     | 5200            | 285                                    | 60 | ±100                     | 70             |
| AM1DS-0509DH52Z | 4.5-5.5           | ±9                 | ±56                     | 5200            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0512DH52Z | 4.5-5.5           | ±12                | ±42                     | 5200            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0515DH52Z | 4.5-5.5           | ±15                | ±33                     | 5200            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-1205DH52Z | 10.8-13.2         | ±5                 | ±100                    | 5200            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1207DH52Z | 10.8-13.2         | ±7.2               | ±70                     | 5200            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1209DH52Z | 10.8-13.2         | ±9                 | ±56                     | 5200            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1212DH52Z | 10.8-13.2         | ±12                | ±42                     | 5200            | 109                                    | 20 | ±100                     | 76             |
| AM1DS-1215DH52Z | 10.8-13.2         | ±15                | ±33                     | 5200            | 109                                    | 30 | ±100                     | 76             |
| AM1DS-2405DH52Z | 21.6-26.4         | ±5                 | ±100                    | 5200            | 59                                     | 13 | ±100                     | 71             |
| AM1DS-2407DH52Z | 21.6-26.4         | ±7.2               | ±70                     | 5200            | 57                                     | 10 | ±100                     | 72             |
| AM1DS-2409DH52Z | 21.6-26.4         | ±9                 | ±56                     | 5200            | 57                                     | 10 | ±100                     | 73             |
| AM1DS-2412DH52Z | 21.6-26.4         | ±12                | ±42                     | 5200            | 58                                     | 17 | ±100                     | 72             |
| AM1DS-2415DH52Z | 21.6-26.4         | ±15                | ±33                     | 5200            | 54                                     | 10 | ±100                     | 76             |
| AM1DS-0505DH60Z | 4.5-5.5           | ±5                 | ±100                    | 6000            | 308                                    | 55 | ±100                     | 65             |
| AM1DS-0507DH60Z | 4.5-5.5           | ±7.2               | ±70                     | 6000            | 285                                    | 60 | ±100                     | 70             |
| AM1DS-0509DH60Z | 4.5-5.5           | ±9                 | ±56                     | 6000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0512DH60Z | 4.5-5.5           | ±12                | ±42                     | 6000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-0515DH60Z | 4.5-5.5           | ±15                | ±33                     | 6000            | 281                                    | 60 | ±100                     | 71             |
| AM1DS-1205DH60Z | 10.8-13.2         | ±5                 | ±100                    | 6000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1207DH60Z | 10.8-13.2         | ±7.2               | ±70                     | 6000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1209DH60Z | 10.8-13.2         | ±9                 | ±56                     | 6000            | 114                                    | 30 | ±100                     | 73             |
| AM1DS-1212DH60Z | 10.8-13.2         | ±12                | ±42                     | 6000            | 109                                    | 20 | ±100                     | 76             |
| AM1DS-1215DH60Z | 10.8-13.2         | ±15                | ±33                     | 6000            | 109                                    | 30 | ±100                     | 76             |
| AM1DS-2405DH60Z | 21.6-26.4         | ±5                 | ±100                    | 6000            | 59                                     | 13 | ±100                     | 71             |
| AM1DS-2407DH60Z | 21.6-26.4         | ±7.2               | ±70                     | 6000            | 57                                     | 10 | ±100                     | 72             |
| AM1DS-2409DH60Z | 21.6-26.4         | ±9                 | ±56                     | 6000            | 57                                     | 10 | ±100                     | 73             |
| AM1DS-2412DH60Z | 21.6-26.4         | ±12                | ±42                     | 6000            | 58                                     | 17 | ±100                     | 72             |
| AM1DS-2415DH60Z | 21.6-26.4         | ±15                | ±33                     | 6000            | 54                                     | 10 | ±100                     | 76             |

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     |
| Input reflected Ripple current | With 12uH inductance | 20        |         | mA p-p |

## Isolation Specifications

| Parameters         | Conditions | Typical | Rated                         | Units |
|--------------------|------------|---------|-------------------------------|-------|
| Tested I/O voltage | 60 sec     |         | 1000, 3000, 4000, 5200 & 6000 | VDC   |
| Resistance         |            | > 1000  |                               | MOhm  |
| Capacitance        |            | 10      |                               | pF    |

## Output Specifications

| Parameters                          | Conditions         | Typical       | Maximum | Units  |
|-------------------------------------|--------------------|---------------|---------|--------|
| Voltage accuracy                    |                    | ±3            |         | %      |
| Voltage balance (Dual Output model) | Balanced Load      | ±1            |         | %      |
| Short Circuit protection            |                    | Continuous    |         |        |
| Short circuit restart               |                    | Auto-Recovery |         |        |
| Line voltage regulation             | For 1.0% of Vin    | ±1.2          |         | %      |
| Load voltage regulation             | load 20~100%       | ±10           |         | %      |
| Temperature coefficient             |                    | ±0.02         |         | %/°C   |
| Ripple & Noise                      | At 20MHz Bandwidth | 75            |         | mV p-p |
| Rising time                         |                    | 50            |         | ms     |

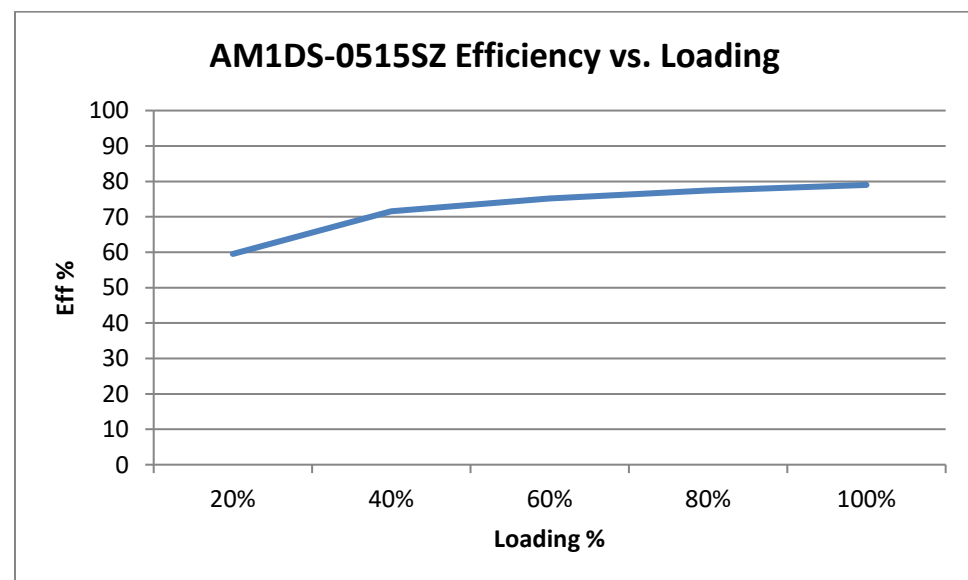
## General Specifications

| Parameters             | Conditions                 | Typical                                                 | Maximum | Units |
|------------------------|----------------------------|---------------------------------------------------------|---------|-------|
| Switching frequency    | 100% load, variable        | 80                                                      |         | KHz   |
| Operating temperature  | Full load without derating | -40 to +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 UL 94 V-0                  |         |       |
| Weight                 |                            | 2.3                                                     |         | g     |
| Dimensions (L x W x H) |                            | 0.77 x 0.24 x 0.39 inch 19.50 x 6.00 x 10.00 mm         |         |       |
| MTBF                   |                            | >1 121 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C) |         |       |

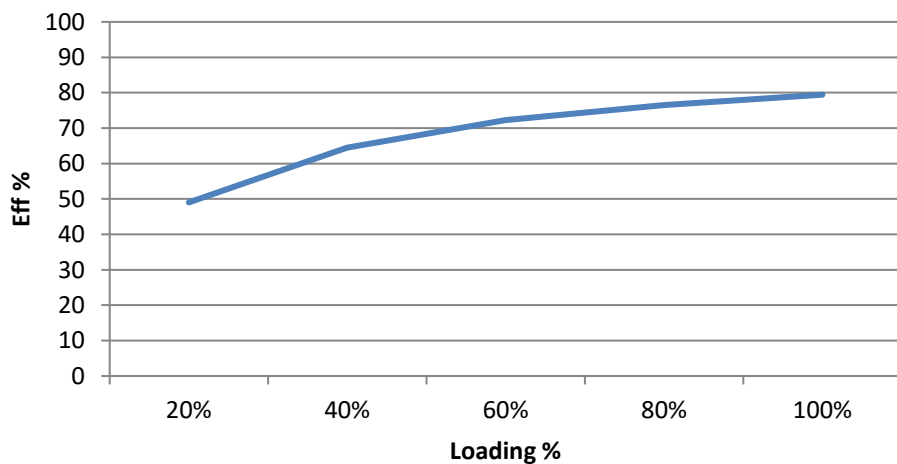
## Safety Specifications

| Parameters |                              |
|------------|------------------------------|
| Safety     | Designed to meet IEC 60950-1 |

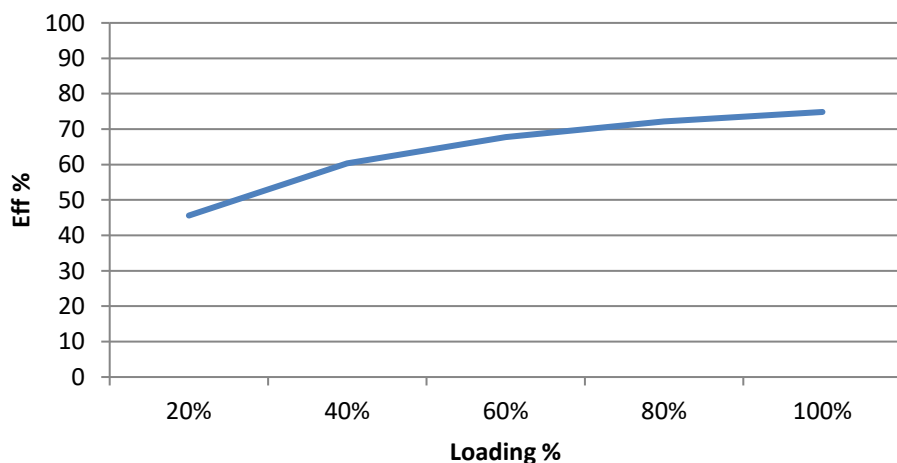
## Typical Efficiency Example Charts



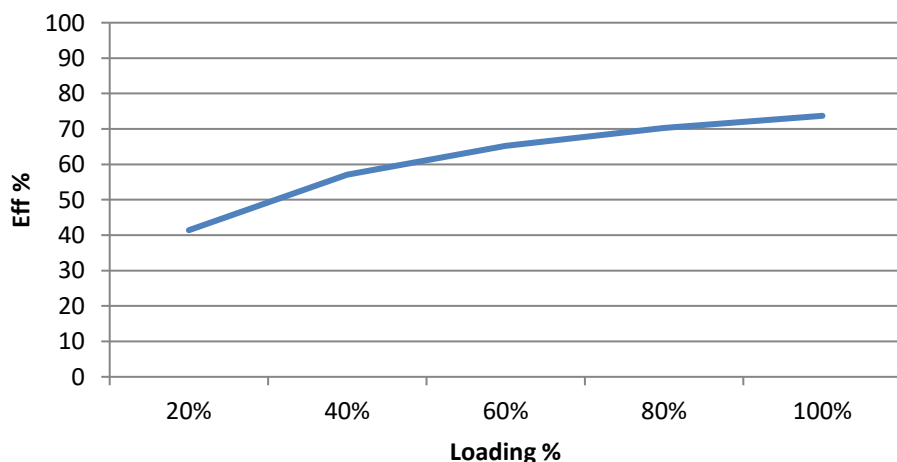
**AM1DS-1212SZ Efficiency vs. Loading**



**AM1DS-1505SZ Efficiency vs. Loading**



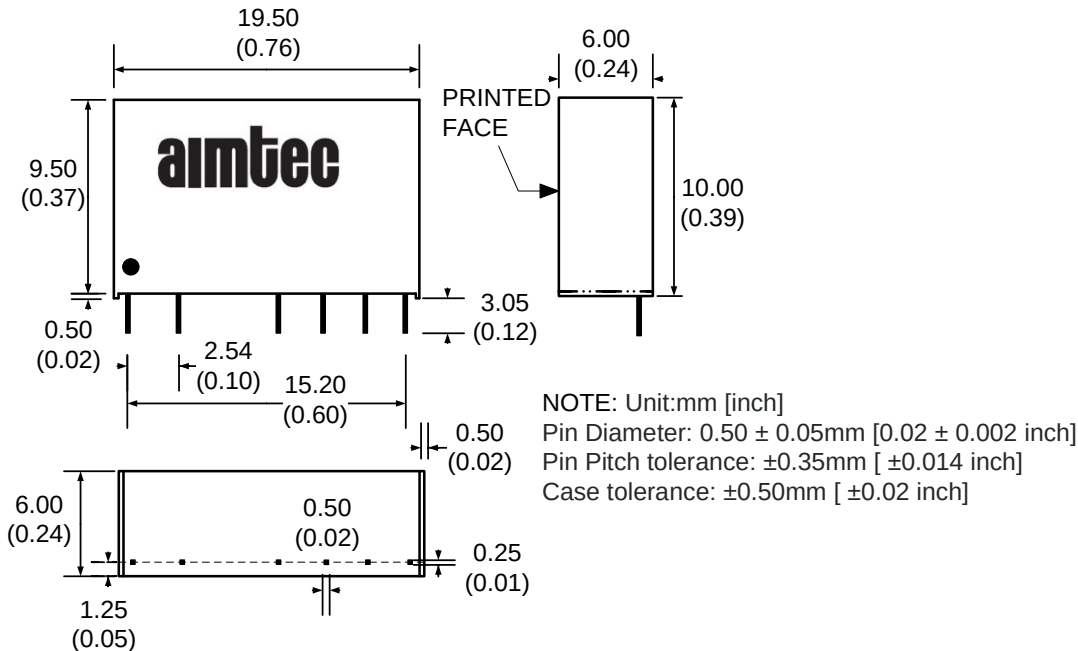
**AM1DS-2412SZ Efficiency vs. Loading**



## Pin Out Specifications

| Pin | Single<br>1000 VDC | Dual<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                           |
| 2   | - V Input          | - V Input        | - V Input                             | - V Input                           |
| 4   | - V Output         | - V Output       | No pin                                | No pin                              |
| 5   | No pin             | Common           | - V Output                            | - V Output                          |
| 6   | + V Output         | + V Output       | No pin                                | Common                              |
| 7   | No pin             | No pin           | + 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).