

### AMD-3 Series

**FEATURES:**

- ✓ Input voltage range 85-305Vac
- ✓ Short circuit, over current, and over voltage protections
- ✓ Board in-line type installation
- ✓ 100% burn-in test
- ✓ 3 year warranty
- ✓ RoHS compliant



| Model   | Input voltage (Vac) | Output voltage (Vdc) | Output current (mA) | Efficiency Typ. |
|---------|---------------------|----------------------|---------------------|-----------------|
| AMD3-3  | 85-305              | 3.3                  | 600                 | 66%             |
| AMD3-5  |                     | 5                    | 600                 | 76%             |
| AMD3-9  |                     | 9                    | 330                 | 78%             |
| AMD3-12 |                     | 12                   | 250                 | 79%             |
| AMD3-15 |                     | 15                   | 200                 | 80%             |
| AMD3-24 |                     | 24                   | 130                 | 81%             |

Note: other input and output models may available on request.

### ELECTRICAL

| Input                   |               |                               |      |      |      |       |
|-------------------------|---------------|-------------------------------|------|------|------|-------|
| Parameters              | Symbols       | Test Conditions / Comment     | Min. | Typ. | Max. | Units |
| Input voltage           | $V_{in}$      | --                            | 85   | --   | 305  | Vac   |
| Input frequency         | $F_{line}$    | --                            | 47   | --   | 440  | Hz    |
| Input current           | $I_{in}$      | Full load, $V_{in} = 115Vac$  | --   | 95   | --   | mA    |
|                         |               | Full load, $V_{in} = 230Vac$  | --   | 46   | --   | mA    |
| Inrush current          | $I_{inrush}$  | Cold start, $V_{in} = 115Vac$ | --   | 16   | --   | A     |
|                         |               | Cold start, $V_{in} = 230Vac$ | --   | 30   | --   | A     |
| Leakage current         | $I_{leakage}$ | $V_{in} = 265Vac/50Hz$        | --   | 0.1  | --   | mA    |
| External fuse recommend | --            | T1A/250Vac(slow break)        |      |      |      |       |

**AMD-3 Series**
**ELECTRICAL**
**Output**

| Parameters              | Symbols        | Test Conditions / Comment    | Min. | Typ.      | Max. | Units |
|-------------------------|----------------|------------------------------|------|-----------|------|-------|
| Output voltage accuracy | $V_{out}$      | $V_{in}=100-240Vac$          | --   | $\pm 0.3$ | --   | %     |
| Line regulation         | $V_{out-line}$ | $V_{in}=100-240Vac$          | --   | $\pm 1.0$ | --   | %     |
| Load regulation         | $V_{out-load}$ | 20%-100% load                | --   | $\pm 1.0$ | --   | %     |
| Ripple                  | $V_{ripple}$   | --                           | --   | 100       | --   | mVp-p |
| Rise time               | --             | Full load, $V_{in} = 115Vac$ | --   | 200       | --   | ms    |
|                         |                | Full load, $V_{in} = 230Vac$ | --   | 100       | --   | ms    |
| Hold time               | --             | Full load, $V_{in} = 115Vac$ | --   | 15        | --   | ms    |
|                         |                | Full load, $V_{in} = 230Vac$ | --   | 40        | --   | ms    |

**Protection**

|               |   |  |  |  |  |  |
|---------------|---|--|--|--|--|--|
| Over current  | Hiccup mode, it will auto-recovery after fault condition is removed |  |  |  |  |  |
| Over voltage  | Hiccup mode, it will auto-recovery after fault condition is removed |  |  |  |  |  |
| Short circuit | Hiccup mode, it will auto-recovery after fault condition is removed |  |  |  |  |  |

**Environment**

|                               |  |  |     |    |     |      |
|-------------------------------|--|--|-----|----|-----|------|
| Storage                       | $T_{storage}$  | Humidity: 10% RH to 95% RH                                   | -40 | -- | +85 | °C   |
| Ambient operating temperature | $T_a$  | Startup at rated voltage<br>(Please refer to derating curve) | -40 | -- | +70 | °C   |
| Operating relative humidity   | $H_a$  | Non condensing   | 10  | -- | 85  | %    |
| MTBF                          | $T_{MTBF}$   | MIL-HDBK-217F(25°C)  | 200 | -- | --  | kHrs |
| Temperature coefficient       | 0.03%/(0~50°C)   |  |     |    |     |      |
| Vibration                     | 10~500Hz, 2G 10min./cycle, 80 min. Each along X, Y, Z axes |  |     |    |     |      |
| Dimension(LxWxH)              | 35x25.4x17.8mm   |  |     |    |     |      |

AMD-3 Series

**ELECTRICAL**

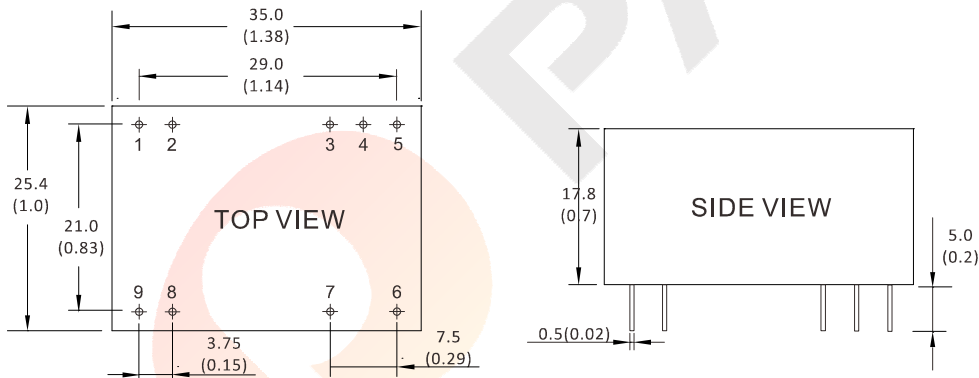
**Safety&EMC**

|                      |   |
|----------------------|---|
| Safety standards     | Design refer to UL1012, EN60950, EN60601, UL60950, EN60601            |
| Isolation voltage    | I/P-O/P: 3.5KVac  |
| Isolation Resistance | I/P-O/P:>100M Ohms/500VDC/25°C/70%RH                                  |
| EMI/EMC              | Compliance to EN55011, EN55022(CISPR22) class B, EN61000-4-2, 3, 4, 5 |

**Notes:**

1. Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and input nominal voltage.
2. Ripple & Noise are measured at 20MHZ of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF & 47μF parallel capacitor.

**MECHANICAL**



**CONNECTION**

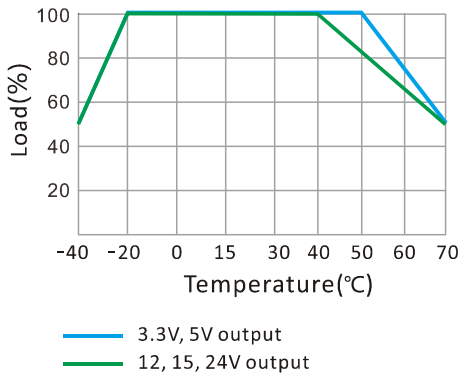
| PIN # | SINGLE |
|-------|--------|
| 1     | NC     |
| 2     | No Pin |
| 3     | +Vo    |
| 4     | -Vo    |
| 5     | NC     |
| 6     | AC     |
| 7     | AC     |
| 8     | No Pin |
| 9     | No Pin |

Note: Unit is mm(inch).

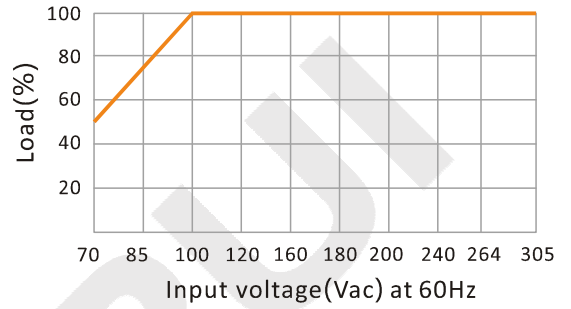
AMD-3 Series

ELECTRICAL CURVE

DERATING CURVE



STATIC CHARACTERISTIC CURVE



NOTE

BLOCK DIAGRAM

