

**KEY FEATURES**

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-63 Hz
- Low Ripple and Noise
- Isolation Class II
- Maximum No-Load Watts < 0.3W
- CE , UL Approval
- 3-Years Product Warranty


**ELECTRICAL SPECIFICATIONS**

| Model No.                                    | AIC-3.3S   | AIC-5S | AIC-9S | AIC-12S | AIC-15S | AIC-24S |
|--|--|--------|--------|---------|---------|---------|
| Max Output Wattage (W)                       | 2.97W  | 3W     | 3W     | 3W      | 3W      | 3W      |
| Input  | Voltage  |        |        |         |         |         |
|  | 90-264 VAC or 120-370 VDC  |        |        |         |         |         |
|  | Frequency (Hz)   |        |        |         |         |         |
|  | 47-63 Hz   |        |        |         |         |         |
|  | Current (Full load)  |        |        |         |         |         |
|  | 75 mA max. (115 VAC) / 55 mA max. (230 VAC)                          |        |        |         |         |         |
| Inrush Current (<500us)                      |  |        |        |         |         |         |
| 20 A max. (115 VAC) / 50 A max. (230 VAC)    |  |        |        |         |         |         |
| Leakage Current                              |  |        |        |         |         |         |
| 0.25 mA max.                                 |  |        |        |         |         |         |
| External Fuse (recommend)                    |  |        |        |         |         |         |
| 3.15 A slow blow type                        |  |        |        |         |         |         |
| Output                                       | Voltage (V.DC.)  |        |        |         |         |         |
|  | 3.3V   | 5V     | 9V     | 12V     | 15V     | 24V     |
|  | Voltage Accuracy   |        |        |         |         |         |
|  | ±10%   |        |        |         |         |         |
|  | Current (mA) max   |        |        |         |         |         |
|  | 900  | 600    | 333    | 250     | 200     | 125     |
|  | Line Regulation (LL-HL) (typ.)                                       |        |        |         |         |         |
|  | ±5%  |        |        |         |         |         |
|  | Load Regulation (0-100%) (typ.)                                      |        |        |         |         |         |
|  | ±5%  |        |        |         |         |         |
|  | Minimum Load   |        |        |         |         |         |
| 0%   |  |        |        |         |         |         |
| Maximum Capacitive Load                      |  |        |        |         |         |         |
| 14000uF                                      | 8000uF   | 3200uF | 1500uF | 1000uF  | 470uF   |         |
| Ripple & Noise (Vp-p) max                    |  |        |        |         |         |         |
| <250mV                                       |  |        |        |         |         |         |
| Efficiency                                   |  |        |        |         |         |         |
| 69%  | 71%  | 76%    | 76%    | 76%     | 77%     |         |
| Hold-up Time                                 |  |        |        |         |         |         |
| 15 ms min.                                   |  |        |        |         |         |         |
| Switching Frequency                          |  |        |        |         |         |         |
| 132±8 KHz                                    |  |        |        |         |         |         |
| Protection                                   | Over Power Protection  |        |        |         |         |         |
|  | Hiccup technique, auto-recovery                                      |        |        |         |         |         |
|  | Over Voltage Protection  |        |        |         |         |         |
| Zener diode clamp                            |  |        |        |         |         |         |
| Short Circuit Protection                     |  |        |        |         |         |         |
| Hiccup mode, indefinite (automatic recovery) |  |        |        |         |         |         |
| Isolation                                    | Input-Output (V.AC)  |        |        |         |         |         |
| 3750V  |  |        |        |         |         |         |
| Environment                                  | Operating Temperature  |        |        |         |         |         |
|  | -40°C...+85°C ( with derating )                                      |        |        |         |         |         |
|  | Storage Temperature  |        |        |         |         |         |
|  | -40°C...+85°C  |        |        |         |         |         |
|  | Temperature Coefficient  |        |        |         |         |         |
| ±0.02%/°C                                    |  |        |        |         |         |         |
| Humidity                                     |  |        |        |         |         |         |
| 95% RH                                       |  |        |        |         |         |         |
| MTBF   |  |        |        |         |         |         |
| >650,000 h @ 25°C (MIL-HDBK-217F)            |  |        |        |         |         |         |
| Physical                                     | Dimension (L x W x H)  |        |        |         |         |         |
|  | 1.41x 0.75 x 0.86 Inches ( 35.7 x 19.0 x 22.0 mm ) Tolerance ±0.5 mm |        |        |         |         |         |
|  | Case Material  |        |        |         |         |         |
|  | Plastic resin with Fiberglass (flammability to UL 94V-0)             |        |        |         |         |         |
| Weight                                       |  |        |        |         |         |         |
| 26 g   |  |        |        |         |         |         |
| Cooling Method                               |  |        |        |         |         |         |
| Free air convection                          |  |        |        |         |         |         |
| Safety                                       | Agency Approvals   |        |        |         |         |         |
| UL, cUL, CE                                  |  |        |        |         |         |         |
| EMC  | EMI (Conducted & Radiated Emission)                                  |        |        |         |         |         |
|  | EN 55022 class B   |        |        |         |         |         |
| EMS (Noise Immunity)                         |  |        |        |         |         |         |
| EN 55024                                     |  |        |        |         |         |         |

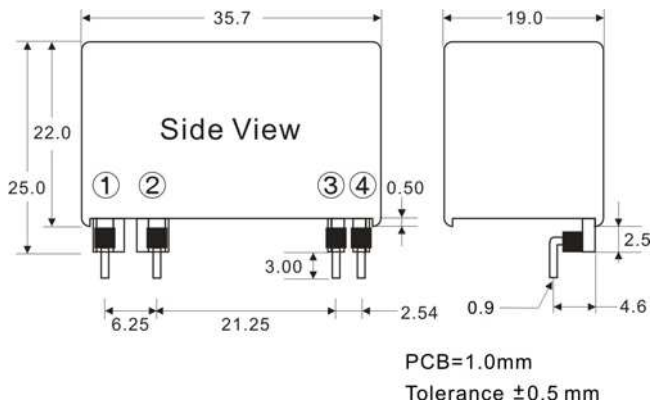
1. All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.

2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.

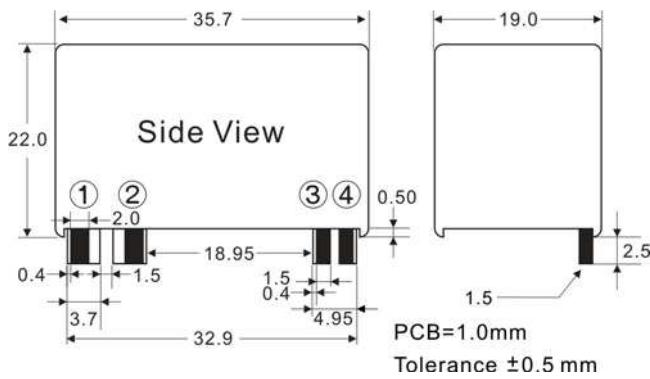
**MECHANICAL DIMENSION**

<http://www.archcorp.com.tw>

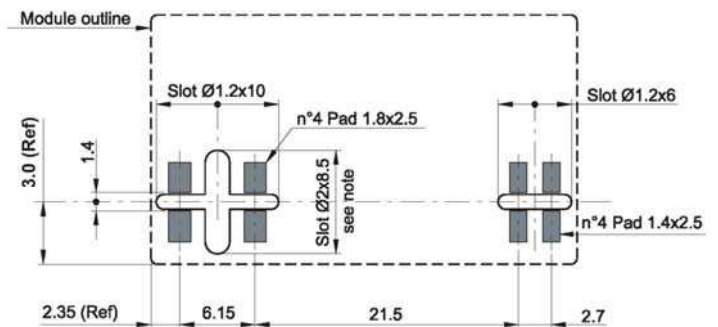
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**A Type**


| PIN# | SINGLE    |
|------|-----------|
| 1    | AC IN (L) |
| 2    | AC IN (N) |
| 3    | +DC OUT   |
| 4    | -DC OUT   |

**B Type**


PCB Footprint - Bottom side view


**NOTE:**

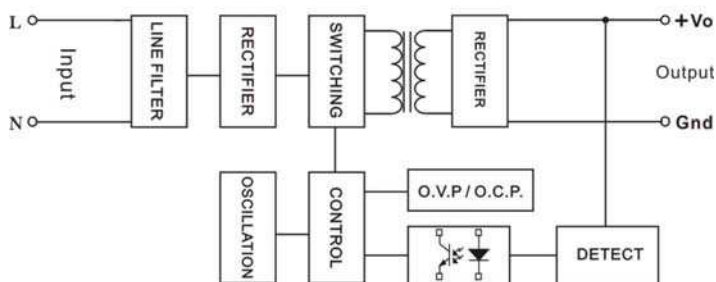
The 2x8.5mm slot is not mandatory

This slot is useful when high creepage between PCB tracks is required

| PIN# | SINGLE    |
|------|-----------|
| 1    | AC IN (L) |
| 2    | AC IN (N) |
| 3    | +DC OUT   |
| 4    | -DC OUT   |

**BLOCK DIAGRAM**

Single Output


**DERATING**
