



■ Features :

- Wide 4:1 DC input range
- In/out capacitance 1000pF
- Protections: Short circuit/Over load/Over voltage
- 500~1500VDC I/O isolation for D/D
- Built-in EMI filter
- Cooling by free air convection
- Built-in remote ON-OFF control
- 100% full load burn-in test
- Fixed switching frequency at 400~450KHz
- Lost cost
- High reliability
- 2 years warranty

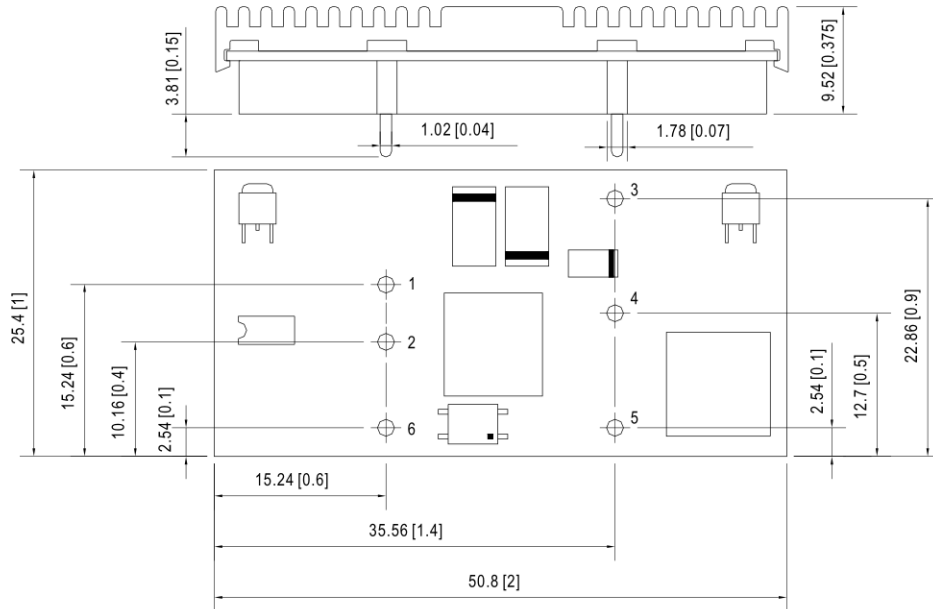


**SPECIFICATION**

| MODEL                  | ASD10H-12S3  | ASD10H-12S5   | ASD10H-12S9 | ASD10H-12S12 | ASD10H-12S15 | ASD10H-48S3  | ASD10H-48S5                   | ASD10H-48S9 | ASD10H-48S12 | ASD10H-48S15 |              |
|------------------------|--|---|-------------|--------------|--------------|--------------|-------------------------------|-------------|--------------|--------------|--------------|
| OUTPUT                 | DC VOLTAGE   | 3.3V  | 5V          | 9V           | 12V          | 15V          | 3.3V                          | 5V          | 9V           | 12V          | 15V          |
|                        | RATED CURRENT  | 2.5A  | 2A          | 1.1A         | 0.83A        | 0.67A        | 2.5A                          | 2A          | 1.1A         | 0.83A        | 0.67A        |
|                        | CURRENT RANGE  | 0.12 ~ 2.5A   | 0.1 ~ 2A    | 0.05 ~ 1.1A  | 0.04 ~ 0.83A | 0.03 ~ 0.67A | 0.12 ~ 2.5A                   | 0.1 ~ 2A    | 0.05 ~ 1.1A  | 0.04 ~ 0.83A | 0.03 ~ 0.67A |
|                        | RATED POWER  | 8.25W   | 10W         | 9.9W         | 9.96W        | 10.05W       | 8.25W                         | 10W         | 9.9W         | 9.96W        | 10.05W       |
|                        | RIPPLE & NOISE (max.) Note.2   | 75mVp-p(10% ~ 100% load)  |             |              |              |              |                               |             |              |              |              |
|                        | VOLTAGE TOLERANCE Note.3   | ±2.0% max.  |             |              |              |              |                               |             |              |              |              |
|                        | LINE REGULATION  | ±1.0% at 10% ~ 100% load  |             |              |              |              |                               |             |              |              |              |
| LOAD REGULATION Note.4 | ±2.0%  | ±1.0%   | ±1.0%       | ±1.0%        | ±1.0%        | ±2.0%        | ±1.0%                         | ±1.0%       | ±1.0%        | ±1.0%        |              |
| INPUT                  | RATED DC INPUT   | 12VDC   |             |              |              |              | 48VDC                         |             |              |              |              |
|                        | VOLTAGE RANGE  | 9.2 ~ 36VDC(50V surge 10ms)   |             |              |              |              | 22 ~ 72VDC(100V surge 10ms)   |             |              |              |              |
|                        | EFFICIENCY (Typ.)  | 71%   | 72%         | 76%          | 77%          | 77%          | 74%                           | 77%         | 78%          | 78%          | 80%          |
|                        | DC CURRENT   | 1.4A/12VDC  |             |              |              |              | 0.4A/48VDC                    |             |              |              |              |
|                        | SHUTDOWN IDLE CURRENT  | 15mA  |             |              |              |              |                               |             |              |              |              |
| PROTECTION             | OVER LOAD  | Above 105% rated output power<br>Protection type : Over power limiting, recovers automatically after fault condition is removed |             |              |              |              |                               |             |              |              |              |
|                        | OVER VOLTAGE(CLAMP)  | 3.8 ~ 4.95V   | 5.75 ~ 7.5V | 10.4 ~ 13.5V | 13.8 ~ 18V   | 17.3 ~ 22.5V | 3.8 ~ 4.95V                   | 5.75 ~ 7.5V | 10.4 ~ 13.5V | 13.8 ~ 18V   | 17.3 ~ 22.5V |
|                        | SHORT CIRCUIT  | Recovers automatically after fault condition is removed   |             |              |              |              |                               |             |              |              |              |
| FUNCTION               | ON/OFF CONTROL   | Logic "1" OPEN: ON logic "0" GND: OFF   |             |              |              |              |                               |             |              |              |              |
| ENVIRONMENT            | WORKING TEMP.  | -25 ~ +71°C   |             |              |              |              |                               |             |              |              |              |
|                        | WORKING HUMIDITY   | 0% ~ 95% RH max. Heatsink temp.110°C  |             |              |              |              |                               |             |              |              |              |
|                        | STORAGE TEMP., HUMIDITY  | -40 ~ +125°C, 0 ~ 95% RH  |             |              |              |              |                               |             |              |              |              |
|                        | TEMP. COEFFICIENT  | ±0.03%/°C (0~50°C)  |             |              |              |              |                               |             |              |              |              |
| SAFETY & EMC           | SAFETY STANDARDS   | Design refer to UL1950, TUV EN60950   |             |              |              |              |                               |             |              |              |              |
|                        | ISOLATION VOLTAGE  | I/P-O/P:0.5KVDC for ASD10H-12S series   |             |              |              |              | 1.5KVDC for ASD10H-48S series |             |              |              |              |
|                        | ISOLATION RESISTANCE   | I/P-O/P:100M Ohms/500VDC  |             |              |              |              |                               |             |              |              |              |
|                        | EMI CONDUCTION & RADIATION   | Compliance to FCC Part15 J  |             |              |              |              |                               |             |              |              |              |
| OTHERS                 | MTBF   | 274.4K hrs min. MIL-HDBK-217F (25°C)  |             |              |              |              |                               |             |              |              |              |
|                        | DIMENSION  | 25.4*50.8*9.52mm (1"*2"*0.375") (L*W*H)   |             |              |              |              |                               |             |              |              |              |
|                        | PACKING  | 0.02Kg; 300pcs/7Kg/0.97CUFT   |             |              |              |              |                               |             |              |              |              |
| NOTE                   | <p>1. All parameters NOT specially mentioned are measured at 12,48VDC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Load regulation is measured from 10% to 100% rated load.</p> <p>5. Short circuit not more than 30 second.</p> |   |             |              |              |              |                               |             |              |              |              |

## Mechanical Specification

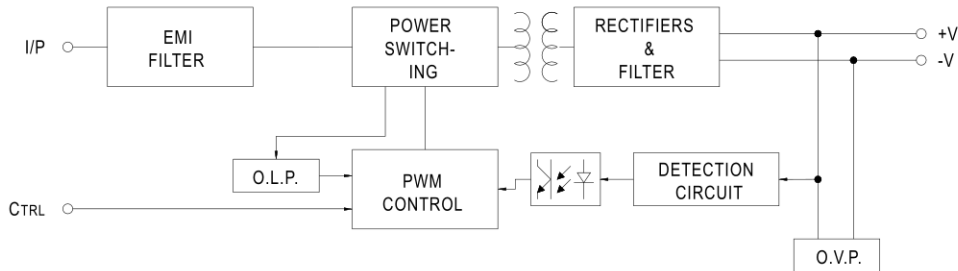
Unit:mm[inch]



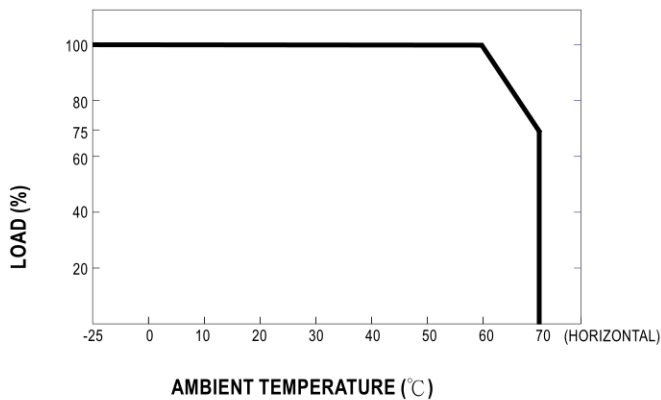
Pin. No Assignment

| Pin No. | Assignment  | Pin No. | Assignment |
|---------|-------------|---------|------------|
| 1       | +INPUT      | 4       | N/C        |
| 2       | -INPUT(GND) | 5       | -OUT       |
| 3       | +OUT        | 6       | CONTROL    |

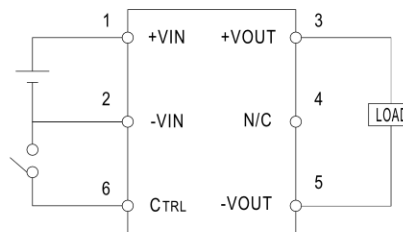
## Block Diagram



## Derating Curve



## ON/OFF Control



CONTROL INPUT.....PIN6  
 CONTROL COMMON.....PIN2  
 LOGIC COMPATIBILITY.....CMOS OR OPEN COLLECTOR TTL  
 CONTROL VOLTAGE  
 ON.....+5.5VDC min OR OPEN CIRCUIT  
 OFF.....+2.5VDC max. OR SHORT TO PIN2