Features

1. Wide input range (90-305VAC, 100-430VDC)
2. Size 101.6*50.8*25.0mm, 4"*2"
3. Protection type: short circuit/over temperature/over load/over voltage
1. Operating temperature range -40℃ to +70℃
2. 3000V isolation voltage
3. Suitable for CLASS II installations
4. 100% high temperature aging and testing
5. 3 years warranty

RoHS CE 3 years Warranty

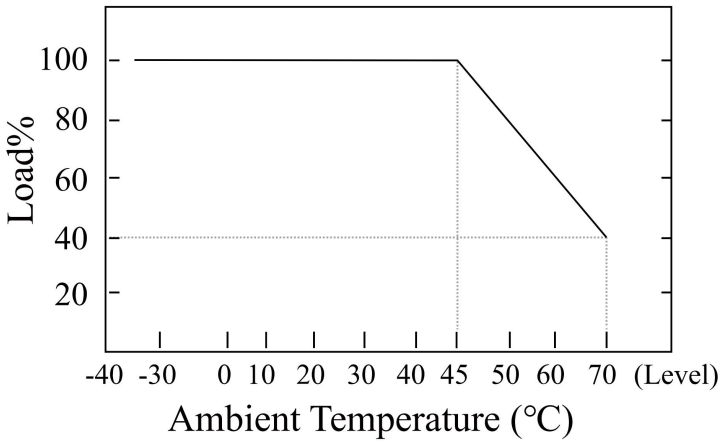
Selection Guide

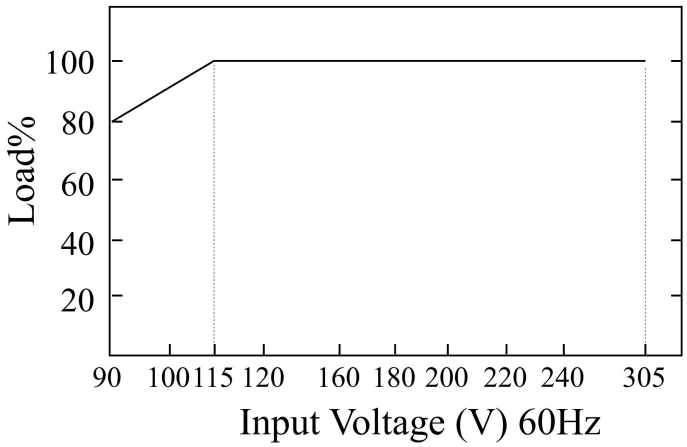
Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Output Current (A)	Ripple & Noise (mVp-p)	Efficiency (%)
ADS-100-05	90-305VAC 100-430VDC	60	5	12	120	82
		90	5	18(fan cooling)	120	74
ADS-100-12		100	12	8.3	120	88
ADS-100-15		100	15	6.6	150	90
ADS-100-24		100	24	4.16	240	90
ADS-100-27		100	27	3.70	240	90
ADS-100-48		100	48	2.08	240	90

Specifications

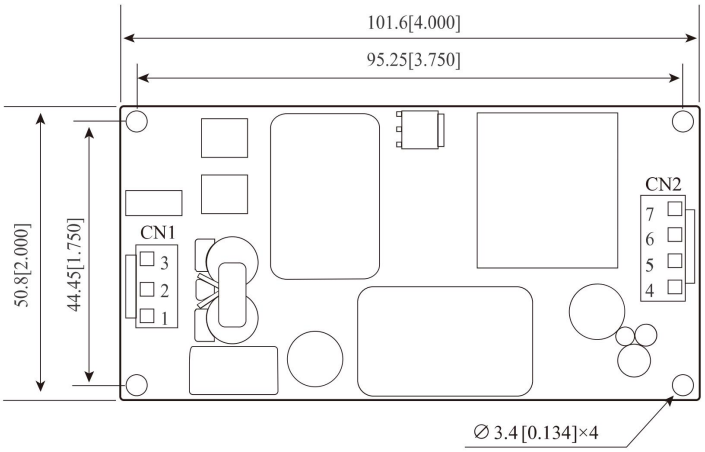
OUTPUT	Voltage Tolerance	±1.0%					
	Line Regulation	±1.0%					
	Load Regulation	±1.0%					
	Setup, Rise Time (Typ.)	1500ms, 30ms/230VAC at full load					
	Hold Up Time (Typ.)	16ms/230VAC at full load					
INPUT	Voltage Range	90-305VAC 100-430VDC					
	Nominal Voltage	100-277VAC					
	Current (Typ.)	1.2A MAX/100VAC 0.8A MAX/240VAC					
	Inrush Current (Typ.)	Cold boot 50A/115VAC 100A/230VAC at full load					
	Leakage Current (Typ.)	<0.75mA/230VAC/60Hz					
PROTECTION	Over Load	≥110% load, self-recovery after troubleshooting					
	Short Circuit	Hiccup mode, self-recovery after troubleshooting					
	Over Temperature	Reduced power output or no output, discharge and restart after power failure					
	Over Voltage	Shut-off output					
		Voltage	5VDC	12VDC	15VDC	24VDC	48VDC
		Range	≤7.5V	≤16V	≤20V	≤30V	≤60V
ENVIRONMENT	Working Temp.	-40°C to +70°C (Refer to "Derating curve")					
	Working Humidity	10-85%RH					
	Storage Temp., Humidity	-40°C to +105°C					
	Temp. Coefficient	0.03%/ (0-50°C)					
	Vibration	10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes					
SAFETY & EMC (NOTE 3.)	Safety Standards	IEC62368, EN62368, Meet to UL62368					
	Isolation Voltage	I/P-O/P: 3000VAC I/P-FG(CASE): 1500VAC O/P-FG(CASE): 500VAC					
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: >100M Ohms/500VDC 25°C 70% RH					
	EMC Emission & Immunity	EN55011, EN55032 (CISPR32) CLASS B					
	ESD	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV					
	RF	IEC/EN 61000-4-3 level 4 lev3					
	EFT	IEC/EN 61000-4-4 level 4 4kV					
	Surge	IEC/EN 61000-4-5 level 4 line to line 2kV/line to ground 4kV					
OTHERS	MTBF	165K hrs min. MIL-HDBK-217F (25°C)					
	Dimension	101.6*50.8*25.0mm (L*W*H)					
	Weight	112g					
NOTE	1. All parameters not specially mentioned, are measured when TA=25°C, humidity<75%, input nominal voltage and output rated load.						
	2. Measurement method of ripple & noise: Parallel line test method shall be adopted. Meanwhile, 0.1uF high-frequency ceramic capacitor and one 47uF electrolytic capacitor shall be connected in parallel at the terminal for measurement under 20Mhz bandwidth.						
	3. The power supply is regarded as a component in the system, and electromagnetic compatibility shall be confirmed in combination with the terminal equipment.						

Derating Curve

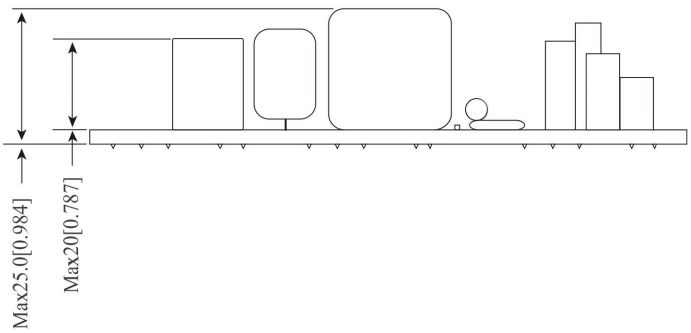




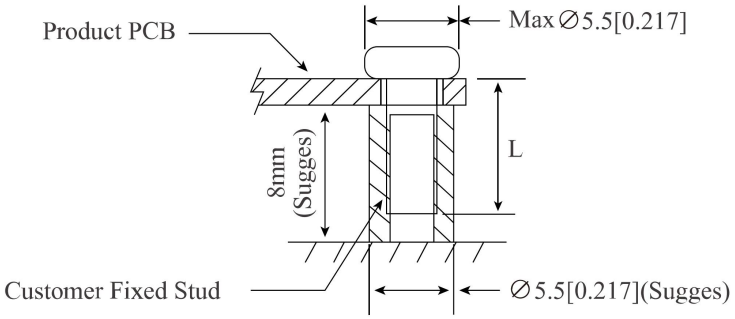
Dimensions & Function



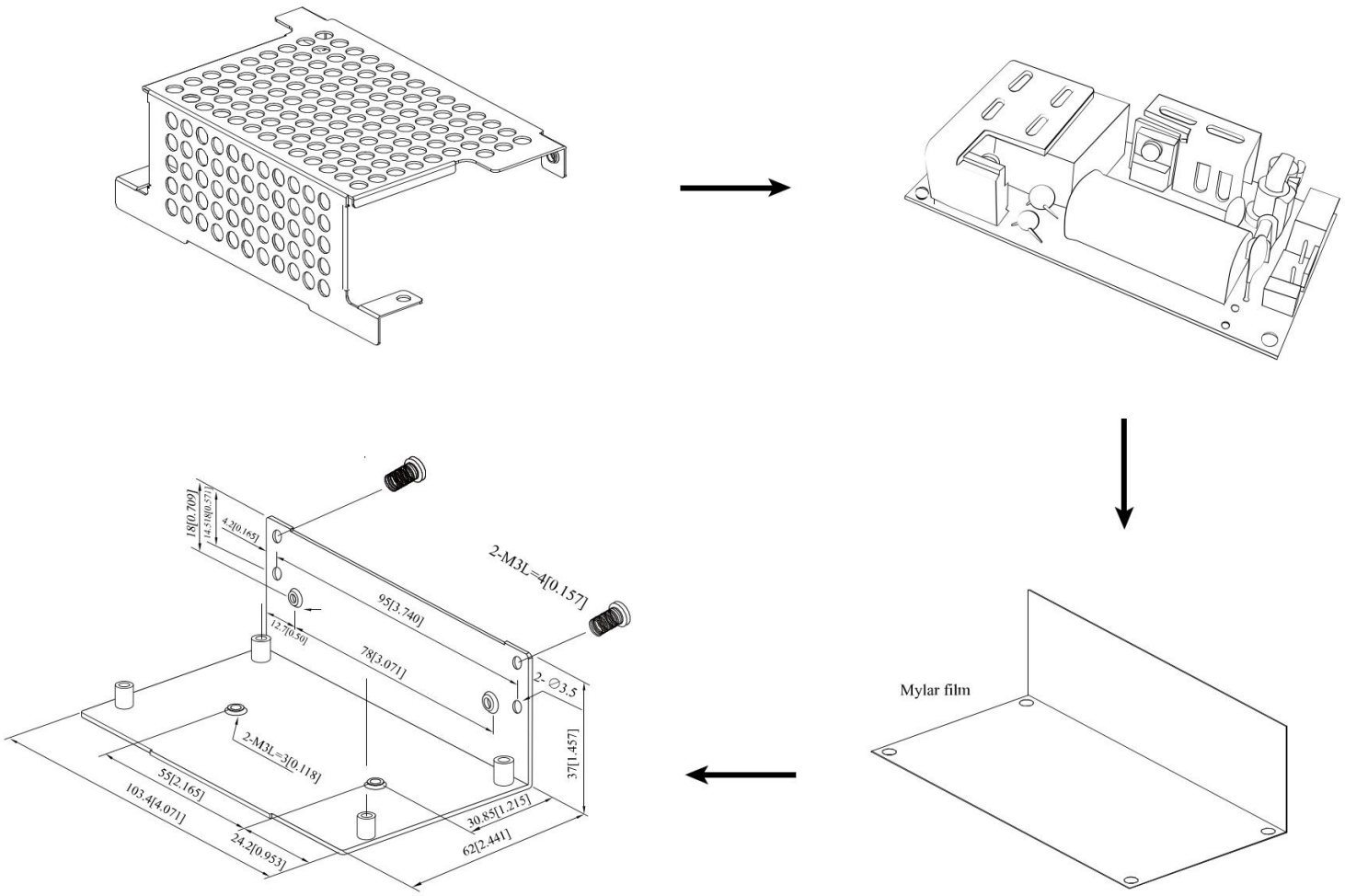
Pin Method			
Connector	Pin	Function	Customer Connection End
CN1	1	AC(N)	Connector:JSTVHR Connector Terminals:JST SVH-21T-P1.1 Or Equivalent Products
	2	No Pin	
	3	AC(L)	
CN2	4	-Vo	Connector:JST VHR Connector Terminals:JST SVH-21T-P1.1 Or Equivalent Products
	5	-Vo	
	6	+Vo	
	7	+Vo	



Installation location	Screw Specifications	L(Suggest)	Torque(max)
①-④	M3	6mm	0.4N ·m



Enclosure type (C) package size



NOTE:

1. Unit size: mm[inch] Unmarked tolerances: ±0.5mm
2. CLASS II system: Unnecessary to connect with safety earth

Notes:

1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
2. The maximum capacitive load is tested under the input voltage range and full load condition;
3. Unless otherwise stated, all indexes in this manual are measured at Ta=25℃, humidity <75%RH, nominal input voltage and rated output load;
4. All index testing methods in this manual are based on the enterprise standards of the company;
5. Our company can provide product customization, specific needs can directly contact our technical staff;
6. AMCHARD reserves the right to make changes to the product at any time without notice.