

ASD-3 & ASD-4 Series

FEATURES:

- ✓ Input voltage range 85-305Vac
- ✓ Short circuit, over current protections
- ✓ Board in-line type installation
- ✓ High voltage isolation 3000Vac
- ✓ 100% burn-in test
- ✓ 3 year warranty
- ✓ RoHS compliant



Model	Input voltage (Vac)	Output voltage (Vdc)	Output current (mA)	Efficiency Typ.
ASD3-3	85-305	3.3	600	64%
ASD3-5		5	600	68%
ASD3-9		9	330	70%
ASD3-12		12	250	72%
ASD3-15		15	200	76%
ASD3-24		24	125	78%
ASD4-3		3.3	800	64%
ASD4-5		5	800	68%
ASD4-9		9	444	70%
ASD4-12		12	333	74%
ASD4-15		15	270	76%
ASD4-24		24	166	78%

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

ELECTRICAL

Parameters	Symbols	Input				Units
		Test Conditions / Comment	Min.	Typ.	Max.	
Input voltage	$V_{in}$	--	85	--	305	Vac
Input frequency	$F_{line}$	--	47	--	440	Hz
Input current	$I_{in}$	Full load, $V_{in} = 115V_{ac}$	--	80	--	mA
		Full load, $V_{in} = 230V_{ac}$	--	40	--	mA
Inrush current	$I_{inrush}$	Cold start, $V_{in} = 230V_{ac}$	--	20	--	A

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**ELECTRICAL**

**Input**

Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Efficiency	$\eta$	115-230Vac	--	75	--	%
Leakage current	$I_{leakage}$	$V_{in} = 230Vac$	--	1	--	mA
Rise time	--	$V_{in} = 115Vac$ , full load	--	1000	--	ms

**Output**

Output voltage accuracy	$V_{out}$	$V_{in} = 100-240Vac$	--	--	2	%
Line regulation	$V_{out-line}$	$V_{in} = 100-240Vac$	--	--	0.2	%
Load regulation	$V_{out-load}$	20%-100% load	--	--	0.5	%
Ripple	$V_{ripple}$	--	--	100	--	mV

**Protection**

Over current	The voltage start to decrease from 0.6A. When reaching 0.9A, it will turn off					
Short circuit	Hiccup mode, it will auto-recovery after fault condition is removed					

**Environment**

Storage	$T_{storage}$	Humidity: 5% RH to 95% RH	-40	--	+90	°C
Ambient operating temperature	$T_a$	Startup at rated voltage (Please refer to derating curve)	-40	--	+85	°C
Operating relative humidity	$H_a$	Non condensing	10	--	90	%
MTBF	$T_{MTBF}$	Full load, 230Vac input, 25°C ambient temperature	--	--	300	kHrs
Dimension(LxWxH)	35x25.4x17.8mm					

**Safety&EMC**

Safety standards	Design refer to UL60950, EN60950, EN60335, EN61558-2-16					
Withstand voltage	I/P-O/P: 3KVac 5mA /1min					
Insulation Resistance	I/P-O/P:>100M Ohms/500VDC/25°C/70%RH					
EMI Conduction&Radiation	Compliance to EN55014-1, EN55014-2, IEC62301, EN55022 CLASS B (CISPR22)					

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**Safety&EMC**

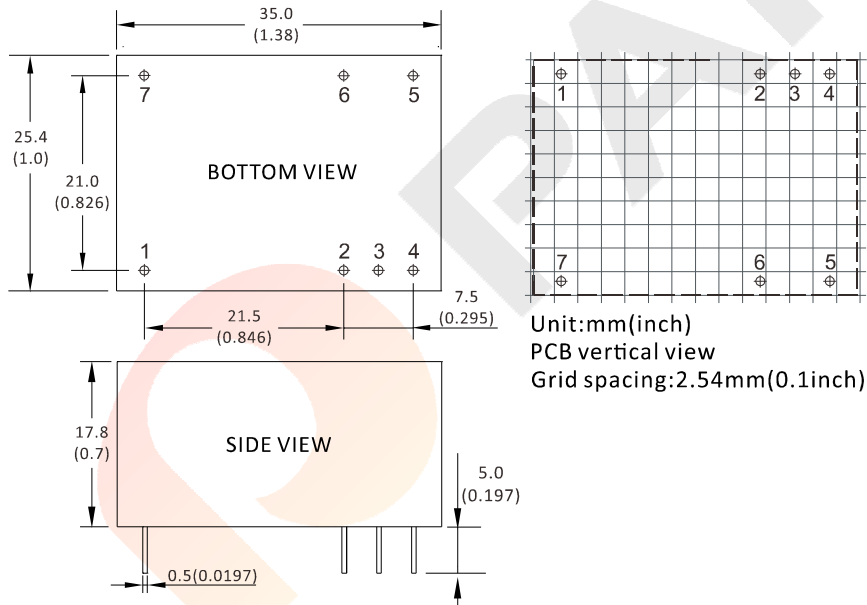
EMS immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11
Harmonic current	Compliance to EN61000-3-2, 3
RFI	Compliance to FCC part 15 subpart B

**ELECTRICAL**

**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**

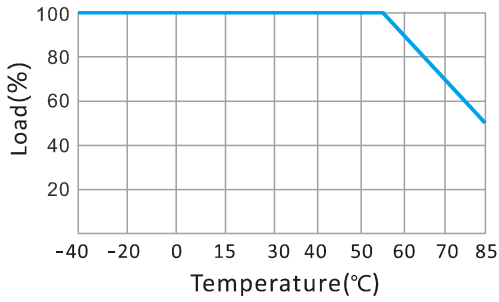
PIN #	SINGLE
1	NC
2	+Vo
3	-Vo
4	NC
5	AC(L)
6	AC(N)
7	NC

Note: Unit is mm (inch).

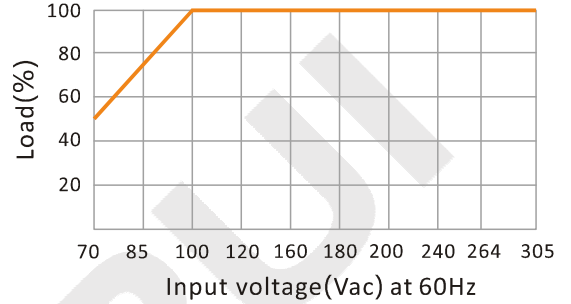
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ELECTRICAL CURVE

DERATING CURVE

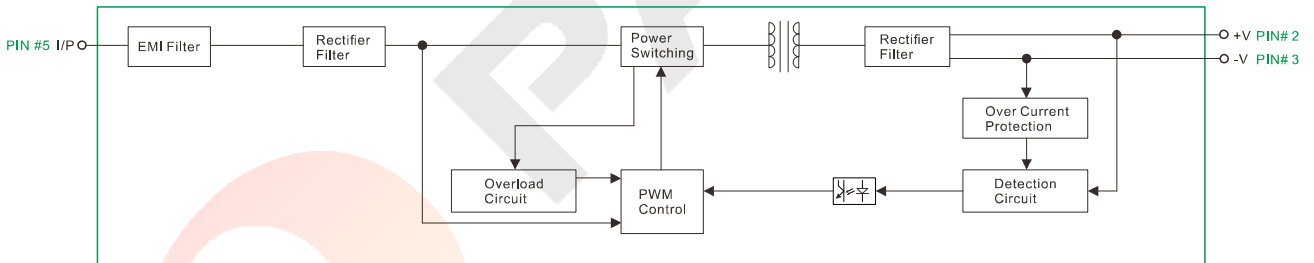


STATIC CHARACTERISTIC CURVE



NOTE

BLOCK DIAGRAM



RECOMMENDED TEST CIRCUIT

