Astrodyne TDI
Now you have power.

40W Ultraminiature Medical Open Frame Switching Power Supplies **ASM40 series**



2"W x 4"L x 1.244"H

- Up to 40W Output Power
- Universal 90-264VAC Input
- Single and Dual Outputs from 5VDC to 48VDC
- High Efficiency up to 86%
- 4000VAC Isolation
- 1U Compatible Height

Model Number	Output Voltage	Max. O/P Amps	Min. O/P Amps	Efficiency @ 230VAC	R&N P-P
SINGLE OUTPUT					
ASM40-5(A)*	5VDC	8	0	77%	300mV
ASM40-9(A)*	9VDC	4.44	0	82%	250mV
ASM40-12(A)*	12VDC	3.33	0	84%	250mV
ASM40-15(A)*	15VDC	2.66	0	84%	250mV
ASM40-24(A)*	24VDC	1.66	0	86%	250mV
ASM40-36(A)*	36VDC	1.11	0	85%	250mV
ASM40-48(A)*	48VDC	0.83	0	86%	250mV
DUAL OUTPUT	**(V1/V2)**	**(I1/I2)**			
ASM40D-1	5/12VDC	3.3/2	0.66/0.40	78%	100/120mV
ASM40D-2	5/15VDC	3.3/1.6	0.66/0.32	82%	100/150mV
ASM40D-3	5/24VDC	3.3/1	0.66/0.20	82%	100/240mV
ASM40D-5	5/48VDC	3.3/0.50	0.66/0.10	83%	100/400mV

*Note: The Single Outputs can be ordered with Molex 09-65-20xx, 5273 series I/O connectors.. Simply add the suffix "A" to the end of the Model Number. For example, ASM40-5A

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INPUT SPECIFICATIONS

Input Voltage Range	90-264 VAC (115-240VAC nom.)
Frequency Range	47-63 Hz
Inrush Current, typ:	30A @ 115VAC Input *
	60A @ 230VAC Input *
Leakage Current	BF <100uA @ 240VAC, 50Hz

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Load Regulation (20%-FL)	
Single O/P:	± 1%
Dual O/P (V1/V2):	± 3/5% max
Line Regulation (LL-HL)	
Single O/P:	± 1% max
Dual O/P (V1/V2):	± 1/2% max
Cross Regulation (Dual Outputs)	
(100-20% L w. other O/P at 60%)	± 5/7% max
Preset Accuracy	Single Output: 1% max.
	Dual Outputs (V1/V2): +7/-9% max.
DC Voltage Adjust (typ)	± 6% of FS (Primary)
Temperature Coefficient	± 0.05%/°C
Ripple/Noise, 20Mhz BW	See Selection Chart
	Measured by paralleling 47uF/EC
	and 0.1uF ceramic capacitors on the
	output at a 20MHz band-width
Over Voltage Protection	Latching, 130% typ, re-power
Over Power Protection	210% +20/-10% nom. I/P range;
	self-recovering *
Short Circuit Protection	Continuous, self-recovering *
Hold Up Time (115V / 60Hz)	10 mS, min.

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranteed nor implied.

GENERAL SPECIFICATIONS

Isolation	Input-Output:	4000VAC
	Input-GND:	1500VAC
	Output-GND:	500VAC
Efficiency, typ		See Selection Chart
Switching Frequency		65Khz, (fixed, typical)
Safety	UL/cUL:	ANSI/AAMI ES60601-1 3rd ed.
		CSA C22.2 No. 60601-1 3rd ed.
	UL-EU:	EN60601-1 3rd ed.
	CB:	IEC60601-1 3rd ed.
	CE:	EN60601-1-2

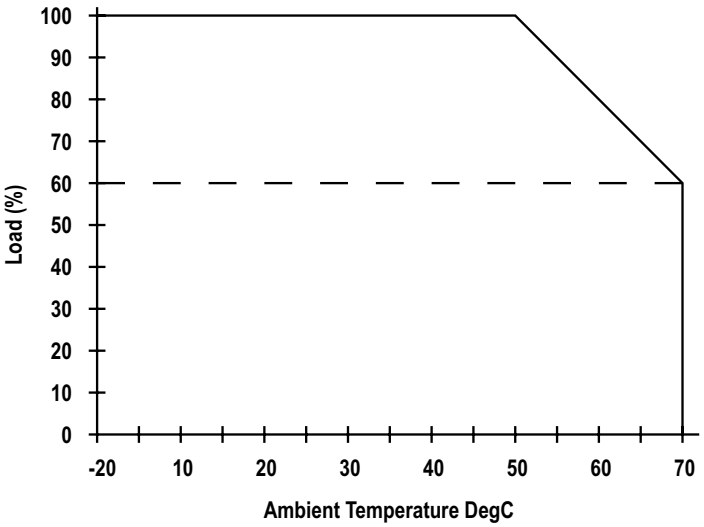
PHYSICAL SPECIFICATIONS

Size	2" x 4" x 1.244"
	50.8 x 101.6 x 31.6mm
Construction	Open Frame
Weight	5.61oz (159g)

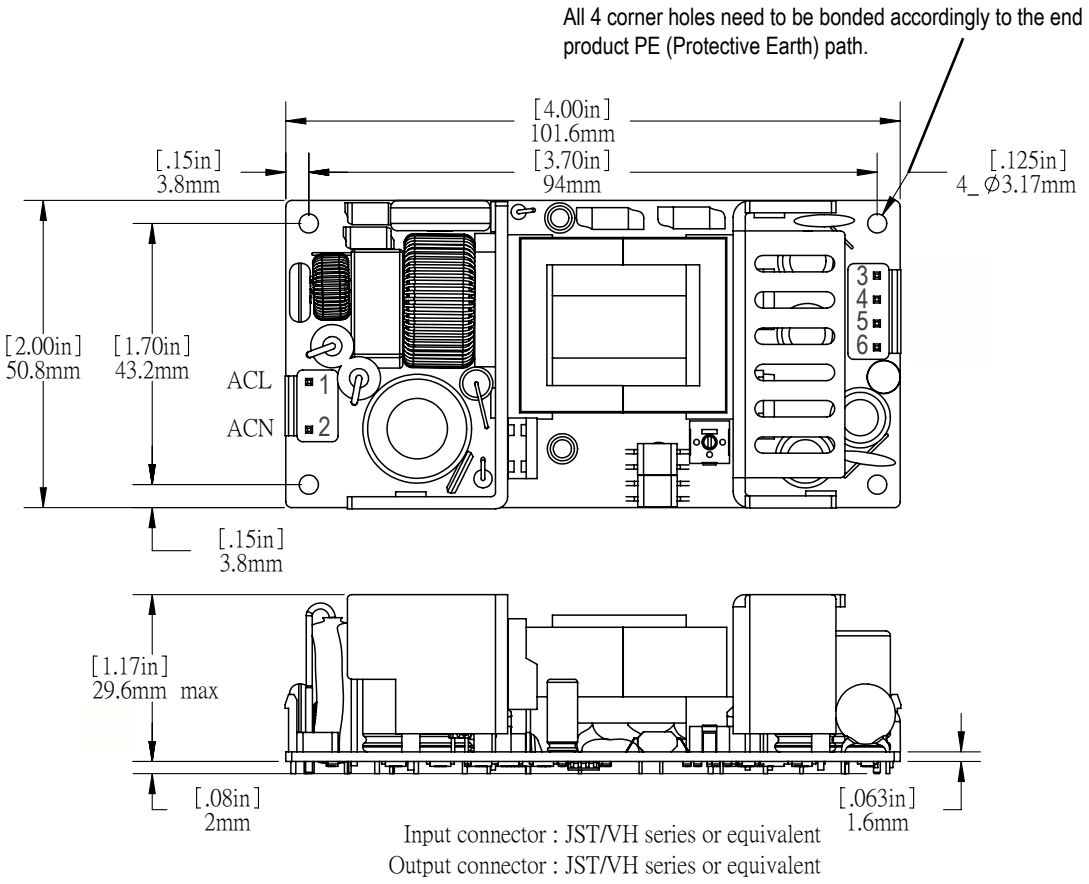
ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-20 to +50°C(FL) , See Derate
Storage Temperature	-40 to +85°C *
Relative Humidity	0 to + 95%, non-cond *
EMI	EN55011 Class B
MTBF (Mil Std 217, 25°C)	185,000 Hrs

OUTPUT DERATING CURVE



MECHANICAL DIMENSIONS WITH JST CONNECTORS - STANDARD



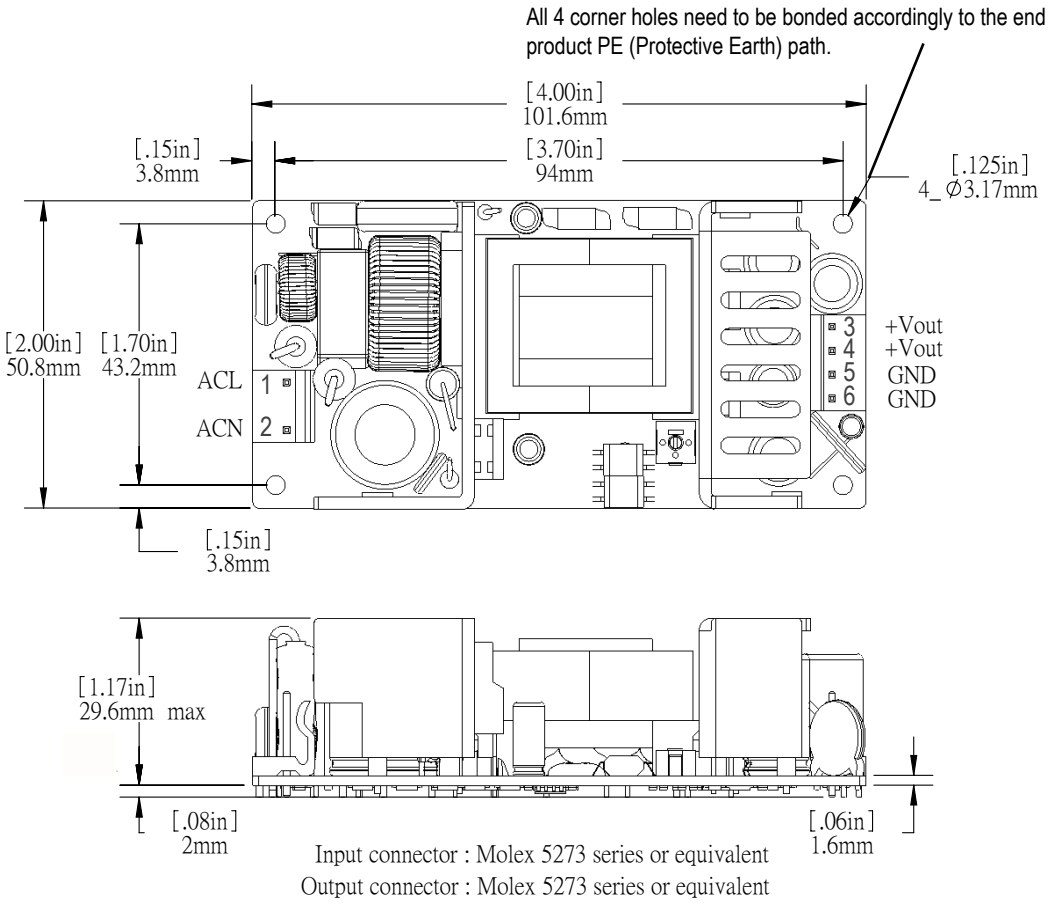
Length 、Width tolerance : ± 0.1mm (0.004in)

Pin #	Single Outputs	Dual Outputs
1	AC Line	AC Line
2	AC Neutral	AC Neutral
3	+ Output	+ Output 2
4	GND	GND
5	GND	GND
6	+ Output	+ Output 1

Connectors and Mating Connectors
Input Connector: JST B3P-VH or Molex 41791 Series (3 Position)
Input Mating Connector: JST VHR-3N or Molex 41695 Series (3 Position)
Output Connector: JST B4P-VH or Molex 41791 Series (4 Position)
Output Mating Connector: JST VHR-4N or Molex 41695 Series (4 Position)

Use with JST # SVH-21T-P1.1 or Molex 2478 Series Crimp Terminals

MECHANICAL DIMENSIONS WITH MOLEX CONNECTORS ("A" VERSIONS SINGLE OUTPUTS ONLY)



Length 、Width tolerance : ± 0.1mm (0.004in)

Pin #	Single Outputs
1	AC Line
2	AC Neutral
3	+ Output
4	+ Output
5	GND
6	GND

Connectors and Mating Connectors
Input Connector: JST B3P-VH or Molex 5273 Series (3 Position)
Input Mating Connector: JST VHR-3N or Molex 3069 Series (3 Position)
Output Connector: JST B4P-VH or Molex 5273 Series (4 Position)
Output Mating Connector: JST VHR-4N or Molex 3069 Series (4 Position)

Use with JST # SVH-21T-P1.1 or Molex 2478 Series Crimp Terminals