ASTRODYNE

5 WATT Ultraminiature Modular Switching Power Supplies

- Single / Dual / Triple Outputs
- Universal 85VAC to 265VAC Input
- 3.3VDC to 24VDC Outputs
- 3,000VAC Input to Output Isolation
- PCB and Chassis Mount Packages
- Full Safety Approvals

MCA-5 Series

Fully Approved
IEC-950, EN60950, UL1950
CSA22.2-950
UL File# E167432, TUV File# B 97 04 22749 008

As Small As 2.28"L x 1.77"W x 0.83"H

MODEL SELECTIONS

Output Voltage	Output Amps/Watts	Size, (inches) (PCB, CHASSIS)	Model Number	Price 1	Price 25
SINGLE OUTPUT					
3.3 VDC	1.25/4W	(PCB) 2.28 x 1.77 x 0.83	MSCA-5000	$62	$59
		(CHA) 3.77 x 2.16 x 1	MSCC-5000	$72	$69
5 VDC	1/5W	(PCB) 2.28 x 1.77 x 0.83	MSCA-5001	$62	$59
		(CHA) 3.77 x 2.16 x 1	MSCC-5001	$72	$69
12 VDC	0.42/5W	(PCB) 2.28 x 1.77 x 0.83	MSCA-5002	$62	$59
		(CHA) 3.77 x 2.16 x 1	MSCC-5002	$72	$69
15 VDC	0.33/5W	(PCB) 2.28 x 1.77 x 0.83	MSCA-5003	$62	$59
		(CHA) 3.77 x 2.16 x 1	MSCC-5003	$72	$69
24 VDC	0.23/5W	(PCB) 2.28 x 1.77 x 0.83	MSCA-5005	$62	$59
		(CHA) 3.77 x 2.16 x 1	MSCC-5005	$72	$69
DUAL OUTPUT					
+/-12 VDC	+/-0.21/5W	(PCB) 2.28 x 1.77 x 0.83	MDCA-5006	$67	$64
		(CHA) 3.77 x 2.16 x 1	MDCC-5006	$78	$74
+/-15 VDC	+/-0.17/5W	(PCB) 2.28 x 1.77 x 0.83	MDCA-5007	$67	$64
		(CHA) 3.77 x 2.16 x 1	MDCC-5007	$78	$74
TRIPLE OUTPUT					
+5,+/-12 VDC	0.6,0.1/0.1/5W	(PCB) 2.28 x 1.77 x 0.83	MTCA-5009	$72	$69
		(CHA) 3.77 x 2.16 x 1	MTCC-5009	$83	$79
+5,+/-15 VDC	0.45,0.1/0.1/5W	(PCB) 2.28 x 1.77 x 0.83	MTCA-5011	$72	$69
		(CHA) 3.77 x 2.16 x 1	MTCC-5011	$83	$79

Contact Us for High Volume Pricing

300 Myles Standish Blvd., Taunton, MA 02780
Ph: 1-800-823-8082 Fax: 508-823-8181

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

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INPUT SPECIFICATIONS

Input Voltage, Nominal	85-265VAC Nominal: 100-240VAC
Input Frequency	47-440 Hz, 50-60Hz Nom.
Inrush Current	20A @ 100VAC, typ 40A @ 200VAC, typ

OUTPUT SPECIFICATIONS

Output Voltage/Current	See Specific Model
Initial Accuracy	+/-1%, adjustable
Voltage Adjust	+/-6%, typ
Load Regulation (20%-FL)	+/-3%, typ
Line Regulation	+/- 3%, typ
Temperature Coefficient	+/-0.03%/DegC
Ripple/Noise(20Mhz BW)	150mV Pk-Pk, typ
Overvoltage Protection	Clamp, 130-150% *
Hold Up Time	30mS, typ
Short Circuit Protection	Continuous, self-recovering*
Current Limit	130% typ,Self-Reset Foldback

* 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 or implied.

GENERAL SPECIFICATIONS

On/Off Control	Open Collector Logic "1"/Open=ON Logic "0"/GND=OFF
Input-Out Isolation	3000VAC
Output-Ground Isolation	1000VAC
Input-Ground Isolation	2500VAC
Operating Frequency	140 Khz, fixed
Efficiency (@ Full Load)	75 - 80%, typ

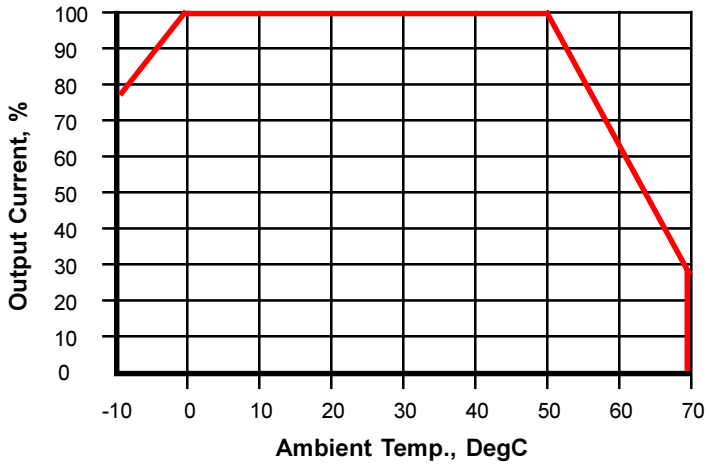
ENVIRONMENTAL SPECIFICATIONS

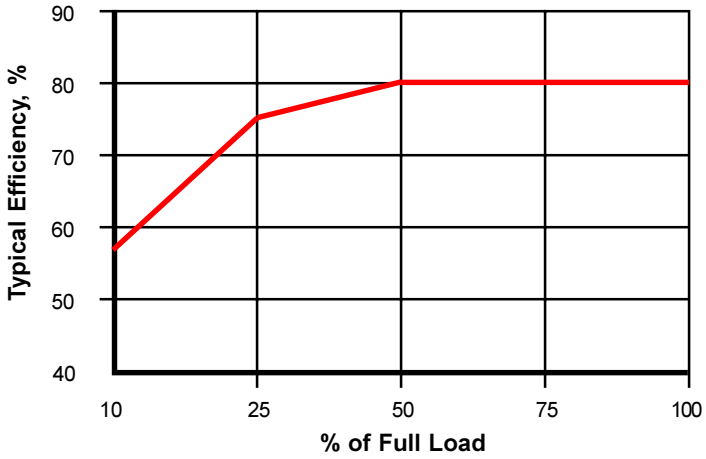
Oper. Temperature	0 to +50 Deg C (Free-air Convection)
Relative Humidity	0-95%, Non-Condensing
Storage Temperature	-25 to +71 DegC *
MTBF	110,000 Hrs Mil Std 217, 25C

PHYSICAL SPECIFICATIONS

Case Material	Rynite, 94V-0 Rated
Construction	Encapsulated, Soft Pot
Weight PCB / CHA	4oz(112g) / 8.5oz(238g)

PERFORMANCE CURVES





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Astrodyne products are not authorized or warranteed for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

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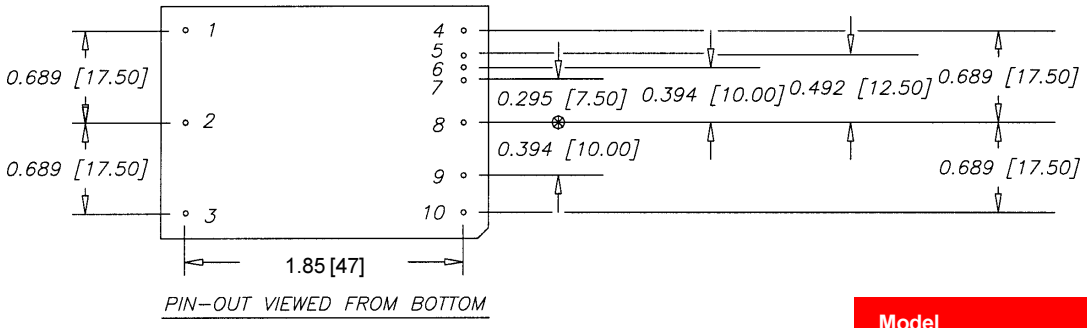
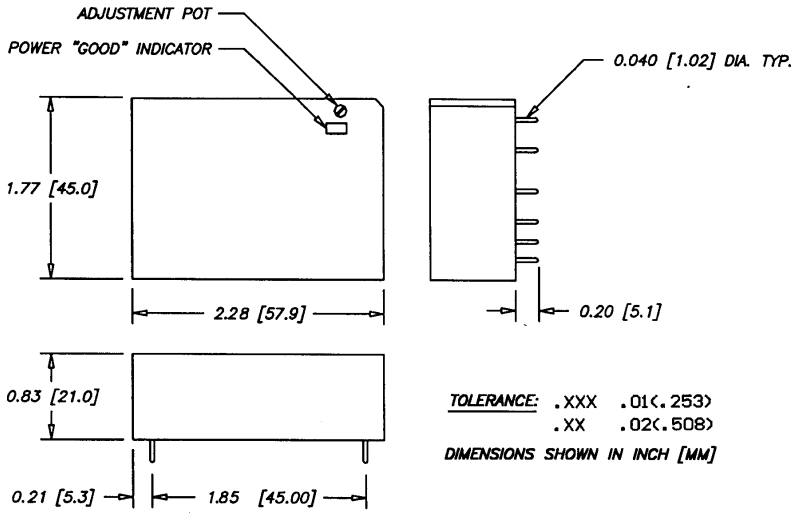
MECHANICAL DIMENSIONS

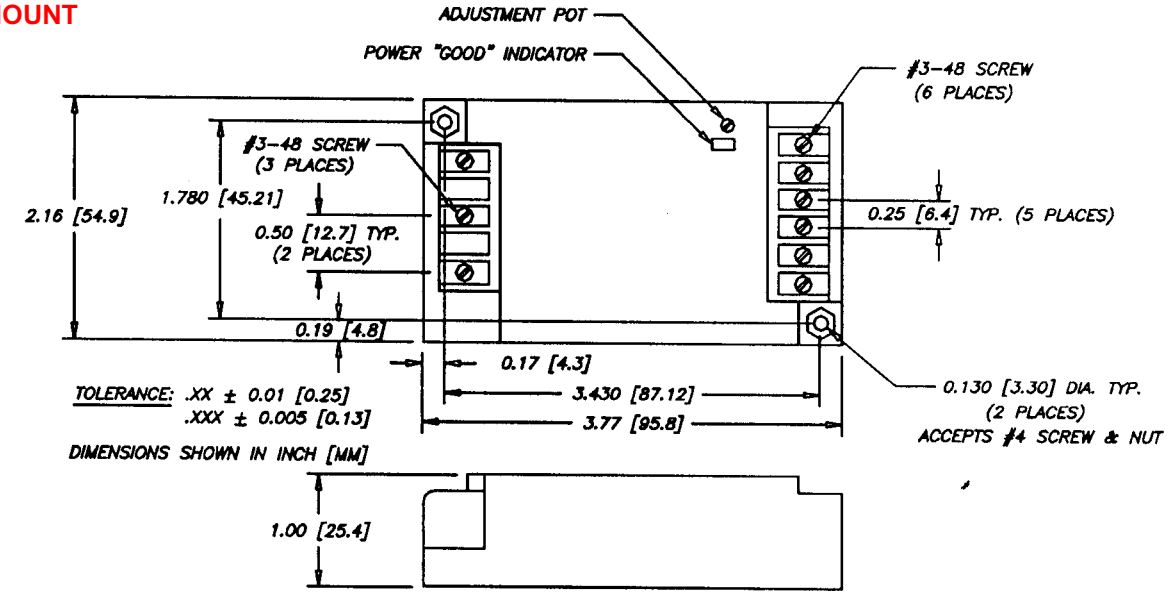
PCB MOUNT





Model Type / Pin#	Single	Dual	Triple
1	AC HI	AC HI	AC HI
2	AC LO	AC LO	AC LO
3	GND	GND	GND
4	No Pin	No Pin	+Vout
5	No Pin	No Pin	Out Com
6	+Vout	+Vout	No Pin
7	No Pin	No Pin	-Vout
8	No Pin	Out Com	+5Vout
9	-Vout	-Vout	5V Ret
10	Ctrl	Ctrl	Ctrl

CHASSIS MOUNT



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