ASTRODYNE

Isolated and Regulated 5 WATT Modular DC/DC Converters

SB05 series





- 5 Sided EMI Shielding
- Regulated Outputs
- 1600V Isolation
- Short Circuit Protection
- 4:1 Input Range
- Input PI Filter

Unit measures 0.8"W x 1.25"L x 0.4"H

Model Number	Output Voltage	Output Amps	Input Range
SINGLE OUTPUT			
SB05-123.3S	3.3VDC	1	9-18 VDC
SB05-243.3S		1	18.36 VDC
SB05-483.3S		1	36-75 VDC
SB05-125S	5 VDC	1	9-18 VDC
SB05-245S		1	18-36 VDC
SB05-485S		1	36-75 VDC
SB05-1212S	12 VDC	0.416	9-18 VDC
SB05-2412S		0.416	18-36 VDC
SB05-4812S		0.416	36-75 VDC
SB05-1215S	15 VDC	0.333	9-18 VDC
SB05-2415S		0.333	18-36 VDC
SB05-4815S		0.333	36-75 VDC
SB05-1224S	24VDC	0.208	9-18 VDC
SB05-2424S		0.208	18-36 VDC
SB05-4824S		0.208	36-75 VDC
DUAL OUTPUT			
SB05-125D	+/-5 VDC	+/-0.5	9-18 VDC
SB05-245D		+/-0.5	18-36 VDC
SB05-485D		+/-0.5	36-75 VDC
SB05-1212D	+/-12 VDC	+/-0.208	9-18 VDC
SB05-2412D		+/-0.208	18-36 VDC
SB05-4812D		+/-0.208	36-75 VDC
SB05-1215D	+/-15 VDC	+/-0.166	9-18 VDC
SB05-2415D		+/-0.166	18-36 VDC
SB05-4815D		+/-0.166	36-75 VDC

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Order On-Line!
astrodyne.com

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

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INPUT SPECIFICATIONS

Input Voltage Ranges:	12 VDC Nominal	9-18 VDC
	24 VDC Nominal	18-36 VDC
	48 VDC Nominal	36-75 VDC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart	
Load Regulation	10% to FL	+/- 1%
Line Regulation	(HL-LL)	+/- 0.5%
Temperature Coefficient	+/-0.02%/°C	
Ripple/Noise(Single/Dual)	0.7% +70mVp-p max.	
Voltage Accuracy	+/- 2%	
Short Circuit Protection	Continuous	
Efficiency	123.3S, 125S, 125D,	
	243.3S, 245S, 245D,	
	483.3S, 485S,	78%
	485D	79%
	1212D, 1215D, 2412D,	
	2415D, 4812D, 4815D	81%
	1212S, 1215S, 1224S,	
	2412S, 2415S, 2424S,	
	4812S, 4815S, 4824S	82%

GENERAL SPECIFICATIONS

Input-Out Isolation	1600VDC
Isolation Resistance	10-9nth Ohm min.
Switching Frequency	300Khz

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +71°C(FL)
Storage Temperature	-55 to +105°C *
Cooling	Free Air Convection

PHYSICAL SPECIFICATIONS

Case Material	Nickel-Coated Copper with Non-Conductive Base
Construction	Fully Encapsulated
Weight	0.9 oz, (25g)

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

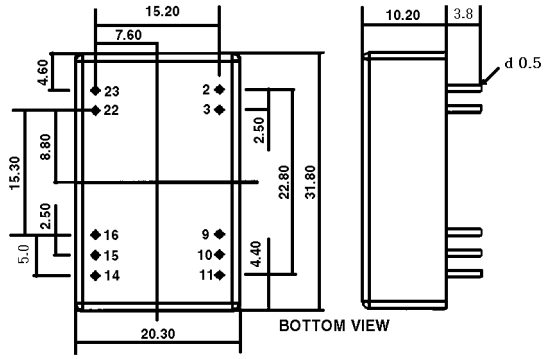
* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranteed nor implied.

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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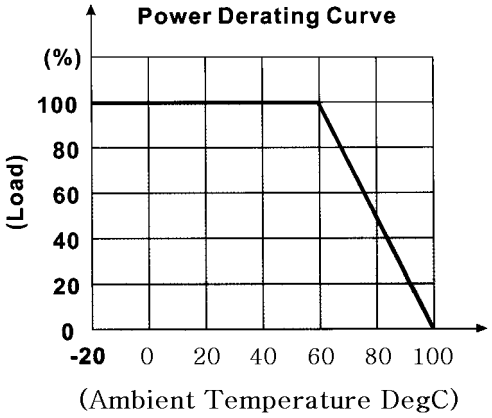
MECHANICAL DIMENSIONS



ALL DIMENSIONS IN mm
PIN PITCH TOLERANCE +/- 0.35mm

Pin #	Single Outputs	Dual Outputs
2	-Vin	-Vin
3	-Vin	-Vin
9	NC	Common
10	NC	NC
11	NC	- Output
14	+ Output	+ Output
15	NC	NC
16	- Output	Common
22	+Vin	+Vin
23	+Vin	+Vin

OUTPUT DERATING CURVE



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