



**Radiated & Conducted
EMI per FCC Class
B & VCCI-11**

Output Adjustment(10%)

Full Agency Approvals

Low Cost

**105° Capacitors for
High Reliability**

**Lambda's 2 Year
Warranty**

Lambda's "VSB" Series single output power supplies, using a PCB design style, with an operating input voltage range of 85 - 132VAC, for usage in both North America and Japanese markets.

Available in seven package sizes to accommodate output power levels from 10 to 150 Watts, and an output voltage range from 3.3 to 48VDC.

All models utilize high performance extended life components, and Lambda's component derating specifications.

Lambda's "VSB" Series will prove to be the economical choice for high reliability, quality, and enhanced lifetime operation.

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AC Input	85-132VAC, 47-440Hz.120% peak for <10s and with a duty cycle of <35%.
DC Input	110-175VDC.
Efficiency	Dependent upon model type at 100VAC, 100% load, 25°C ambient. Examples: VS10B: 63% 3V, 72% 5V, 72% 12V, 73% 15V & 24V. VS150B: 72% 3V, 78% 5V, 80% 12V to 24V, 81% 36 & 48V.
Inrush Current Limiting	30A at 100VAC (Typ).
EMI	Radiated and conducted EMI conforms to FCC Class B, VCCI-II.
Output Voltage Adj Range ..	±10% adj.
Line Regulation	20mV for 3.3 & 5V, 48mV for 12V, 60mV for 15V, 96mV for 24V, 144mV for 36V, 192mV for 48V.
Load Regulation	40mV for 3.3 & 5V, 96mV for 12V, 120mV for 15V, 150mV for 24V, 240mV for 36V, 400mV for 48V.
Ripple and Noise	120mV for 3.3 and 5V. 150mV for 12 and 15V. 200mV for 24V. 300mV for 36V. 400mV for 48V.
Hold-up Time	17ms at 100VAC, 25°C and maximum output power.
Overvoltage Protection	VS10B to VS30B, output clamped by zener diode ~140%. VS50 to VS150B, converter shutdown, manual input reset~125%.
Overload Protection	Current limiting with automatic recovery, approximately 125%. Avoid prolonged operation in overload or dead short.
Operating Temperature Range	-10° to +60°C.
Storage Temperature	-30°C to +85°C.
Isolation	Input to Output – 2.0kVAC. Input to Chassis (FG) – 2.0kVAC. Output to Chassis(FG) – 500kVAC.
Input and Output Connections	JST Connectors.
Safety Agency Approval	UL1950, CSA234, Dentori.
Warranty	2 years.

OUTPUT	POWER (W)	MAX CURRENT AMPS AT			MODEL
		40°	50°	60°	
3.3V (±10%)	6.6	2.00	2.00	1.40	VS10B-3
	9.9	3.00	3.00	2.10	VS15B-3
	19.8	6.00	6.00	4.20	VS30B-3
	33.0	10.00	10.00	7.00	VS50B-3
	49.5	15.00	15.00	10.50	VS75B-3
	66.0	20.00	20.00	14.00	VS100B-3
5V (±10%)	99.0	27.00	24.00	18.00	VS150B-3
	10.0	2.00	2.00	1.40	VS10B-5
	15.0	3.00	3.00	2.10	VS15B-5
	30.0	6.00	6.00	4.20	VS30B-5
	50.0	10.00	10.00	7.00	VS50B-5
	75.0	15.00	15.00	10.50	VS75B-5
12V (±10%)	100.0	20.00	20.00	14.00	VS100B-5
	150.0	27.00	24.00	18.00	VS150B-5
	10.2	0.85	0.85	0.60	VS10B-12
	15.0	1.25	1.25	0.90	VS15B-12
	30.0	2.50	2.50	1.75	VS30B-12
	51.6	4.30	4.30	3.00	VS50B-12
15V (±10%)	75.6	6.30	6.30	4.40	VS75B-12
	105.0	8.50	8.50	5.95	VS100B-12
	151.0	11.25	10.00	7.50	VS150B-12
	10.5	0.70	0.70	0.50	VS10B-15
	15.0	1.00	1.00	0.70	VS15B-15
	30.0	2.00	2.00	1.40	VS30B-15
24V (±10%)	52.5	3.50	3.50	2.50	VS50B-15
	75.0	5.00	5.00	3.50	VS75B-15
	105.0	7.00	7.00	4.90	VS100B-15
	150.0	9.00	8.00	6.00	VS150B-15
	10.8	0.45	0.45	0.30	VS10B-24
	15.6	0.65	0.65	0.45	VS15B-24
36V (±10%)	31.2	1.30	1.30	0.90	VS30B-24
	60.0	2.50	2.50	1.75	VS50B-24
	76.8	3.20	3.20	2.20	VS75B-24
	103.2	4.30	4.30	3.00	VS100B-24
	151.2	5.67	5.04	3.80	VS150B-24
	75.6	2.10	2.10	1.50	VS75B-36
48V (±10%)	108.0	3.00	3.00	2.10	VS100B-36
	151.2	3.80	3.40	2.50	VS150B-36
	76.8	1.60	1.60	1.10	VS75B-48
	105.6	2.20	2.20	1.50	VS100B-48
	153.6	2.90	2.60	1.90	VS150B-48

DIMENSIONS:

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MODEL	A	B	C	D	E	F	G	H	J	K	L	M	
VS10	3.70 (94)	1.93 (49)	.67 (17)	3.425 (87)	.138 (3.5)	1.654 (42)	.138 (3.5)	1.02 (26)	.65 (16.5)	-	-	-	.17 LBS
VS15	4.53 (115)	1.97 (50)	.67 (17)	4.252 (108)	.138 (3.5)	1.693 (43)	.138 (3.5)	1.22 (31)	1.30 (33.25)	-	-	-	.22 LBS
VS30	5.22 (132.5)	1.97 (50)	.98 (25)	4.803 (122.5)	.197 (5)	1.576 (40)	.197 (5)	1.02 (26)	1.18 (30)	-	-	-	.29 LBS
VS50	7.68 (195)	1.97 (50)	.98 (25)	7.283 (185)	.197 (5)	1.576 (40)	.197 (5)	1.10 (28)	.67 (17)	-	-	-	.44 LBS
VS75	8.74 (222.0)	1.97 (50)	1.26 (32)	8.346 (212)	.197 (5)	1.576 (40)	.197 (5)	.85 (21.5)	1.06 (27)	5.335 (135.5)	1.260 (32.5)	-	.77 LBS
VS100	8.74 (222.0)	2.44 (62)	1.26 (32)	8.346 (212)	.197 (5)	2.047 (52)	.197 (5)	.98 (25)	1.22 (31)	4.705 (119.5)	1.673 (42.5)	-	.92 LBS
VS150	8.74 (222.0)	2.95 (75)	1.42 (36)	8.346 (212)	.197 (5)	2.560 (65)	.197 (5)	1.81 (46)	.85 (21.7)	4.961 (126)	2.165 (55)	1.91 (48.5)	1.21 LBS

NOTE:
1. DIMENSIONS ARE IN INCHES EXCEPT DIMENSIONS () ARE IN MM.

