imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



VET18 Series

AC-DC Power Supplies



18 Watt

- Energy Efficiency Level VI
- European CoC Tier 2
- Universal Input
- \bullet Output Voltages from 9 V to 24 V
- Class II Construction
- Low Cost



The VET18 series of desk-top power supplies comply with the very latest energy efficiency level VI standards with high active mode efficiency and extremely low no load power consumption. Available with a standard jack plug connector these adaptors suit a wide variety of cost sensitive applications while maintaining industry leading performance.

Dimensions:

VET18: 4.21 x 1.71 x 1.22" (107.0 x 43.5 x 31.0 mm)

Models & Ratings

Output Power	Output Voltage	Output Current	Total Regulation ⁽²⁾	Output Connector	Model Number
	9.0 V	2000 mA	5%	5.5 x 2.1 x 12 mm DC Jack	VET18US090C2-JA
	12.0 V	1500 mA	5%	5.5 x 2.1 x 12 mm DC Jack	VET18US120C2-JA
18 W	15.0 V	1250 mA	5%	5.5 x 2.1 x 12 mm DC Jack	VET18US150C2-JA
	18.0 V	1000 mA	5%	5.5 x 2.1 x 12 mm DC Jack	VET18US180C2-JA
	24.0 V	750 mA	5%	5.5 x 2.1 x 12 mm DC Jack	VET18US240C2-JA

Notes

1. Other output voltages available, contact sales for details.

2. Total regulation includes initial set accuracy, line and load regulation.

Input					
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Input Voltage	90		264	VAC	
Input Frequency	47		63	Hz	
Input Current			0.3	A	100 VAC
Inrush Current			80	A	240 VAC, cold start at 25 °C
Power Factor					EN61000-3-2, class A
No Load Input Power			75	mW	
Input Protection	Internal T1.0A/250 VAC fuse				

Output					
Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Output Voltage	9		24	V	See Models and Ratings table
Minimum Load	0			A	No minimum load required
Start Up Delay			4	S	
Start Up Rise Time		30		ms	
Hold Up Time	8			ms	Full load and 100 VAC
Total Regulation			5	%	See Models and Ratings table
Transient Response			4	% deviation	Recovely within <1% within 500 μs for a 50% step load change at 0.15 A/ μs
Ripple & Noise			150	mV pk-pk	Measured with 20 MHz bandwidth and 47 μF electrolytic in parallel with 0.1 μF ceramic capacitor
Short Circuit Protection					Continuous, trip and restart (hiccup mode) with auto recovery
Temperature Coefficient			0.05	%/°C	

VET18 Series

AC-DC Power Supplies



General Characteristic Minimum Maximum Units Notes & Conditions Typical Typical average of efficiencies measured at 25%, 50%, 75% 85 % Efficiency and 100% load and 115 VAC input Energy Efficiency Level VI 3000 VAC Input to Output Isolation Switching Frequency 24 70 kHz Variable 250 MIL-HDBK-217F at 25 °C GB Mean Time Between Failure kHrs Weight 0.302 (137.0) lb (g)

Environmental

Characteristic	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating Temperature	0		+60	°C	Derate from 100% load at 40 °C to 50% load at 60 °C
Storage Temperature	-40		+85	°C	
Operating Humidity	5		95	%	RH, non-condensing
Cooling					Natural convection
Shock					1 m drop onto concrete on each of 6 axes
Vibration	10		300	Hz	2 g 15 mins/sweep, 60 mins for each of 3 axes

EMC: Emissions

Phenomenon	Standard	Test Level	Notes & Conditions
Conducted	EN55022	Level B	
Radiated	EN55022	Level B	
Harmonic Current	EN61000-3-2	Class A	
Voltage Flicker	EN61000-3-3		

EMC: Immunity

Phenomenon	Standard	Test Level	Criteria	Notes & Conditions
ESD Immunity	EN61000-4-2	±4 kV contact, ±8 kV air	A	
Radiated Immunity	EN61000-4-3	3 V/m	A	
EFT/Burst	EN61000-4-4	Level 2	A	
Surge	EN61000-4-5	Level 2	А	
Conducted Immunity	EN61000-4-6	3 V	А	
Magnetic Fields	EN61000-4-8	1 A/m	А	
Dips and Interruptions	EN55024 (115VAC)	100% U _T (0 VAC) for 10 ms	А	
		30% U_T (80.5 VAC) for 500 ms	А	
		100% U _T (0 VAC) for 5000 ms	В	
	EN55024 (230VAC)	100% U _T (0 VAC) for 10 ms	А	
		$30\%~U_T$ (161 VAC) for 500 ms	A	
		100% $\mathrm{U_{T}}$ (0 VAC) for 5000 ms	В	

Safety Approvals

Phenomenon	Standard		
CB Report	IEC60950-1		
UL	UL/cUL60950-1, approved as limited power source (LPS)		
TUV	EN60950-1		
CCC	China Compulsory Certification, GB4943		

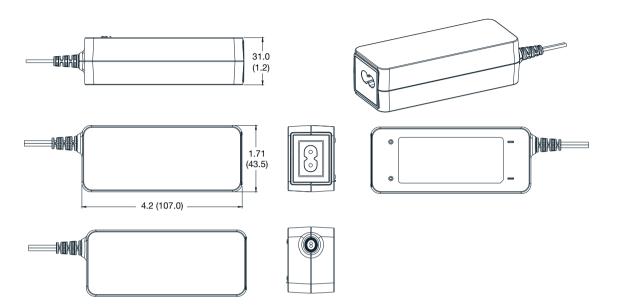
VET18 Series

DC-DC Converter

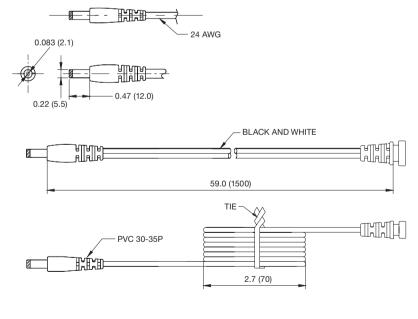


Mechanical Details

VET18USXXXC2-JA



Output Lead and Connection



Wire type: VW-1 80°C 300 V L=1500 mm 2468, 22 AWG for 12 V ouput, 24 AWG for other outputs, 2C Black and White. Black - Negative, White - Positive

 $\mathsf{Polarity} \, \bigcirc \, \textcircled{\bullet} \, \textcircled{\bullet} \, \textcircled{\bullet}$