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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!



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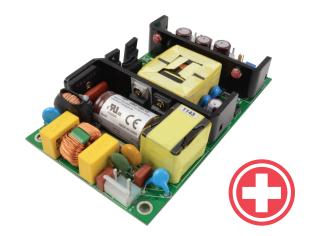
date 07/22/2013

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#### SERIES: VMS-100 **DESCRIPTION:** AC-DC POWER SUPPLY

#### **FEATURES**

- up to 100 W continuous power
- industry standard 3" x 5" footprint
- universal input (90~264 Vac)
- single output from 5 to 48V
- no load power consumption < 0.5W
- over voltage and short circuit protections
- full medical approvals
- built-in active PFC function
- built-in remote sense function
- no minimum load required
- efficiency up to 91%







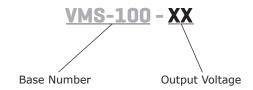


MODEL	output voltage	output current	output power	ripple and noise <sup>1,2</sup>	efficiency
	(Vdc)	max (A)	max (W)	max (mVp-p)	typ (%)
VMS-100-5	5	20	100	100	85
VMS-100-9	9	11.2	100	90	88
VMS-100-12	12	8.4	100	120	89
VMS-100-15	15	6.7	100	150	89
VMS-100-18	18	5.6	100	180	90
VMS-100-24	24	4.2	100	240	91
VMS-100-28	28	3.6	100	280	91
VMS-100-36	36	2.8	100	360	91
VMS-100-48	48	2.1	100	480	91

1. VMS-100-5: Measured at 20MHz, with  $0.1\mu F$  ceramic and 220 $\mu F$  electrolytic capacitors

2. All other models: Measured at 20MHz, with  $0.1\mu F$  ceramic and  $10\mu F$  electrolytic capacitors

#### **PART NUMBER KEY**



# **INPUT**

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
inrush current	at 240 Vac			80	Α

# **OUTPUT**

parameter	conditions/description	min	typ	max	units
line regulation	low line to high line, full load		±0.5		%
load regulation	10% to 100% full load		±1		%
temperature coefficient			±0.05		%/°C
hold-up time			16		ms
adjustability				±5	%
switching frequency		80		100	kHz

# **PROTECTIONS**

parameter	conditions/description	min	typ	max	units
over voltage protection	recycle ac input to restart				
short circuit protection	hiccup mode, recovers automatically				

# **SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output	5,656			Vdc
safety approvals	IEC 60601-1, EN 60601-1, UL 60601-1				
EMI/EMC	EN 55024, EN 61000-6-1, EN 61204-3, EN 600 EN 55011 Class B, EN 55022 Class B, FCC Part	,	-3-2 Class (A	, B, C, D), EN	l 61000-3-3,
leakage current				0.3	mA
RoHS compliant	yes				
MTBF	MIL-HDBK-217F, GB, at 25°C, 115 Vac	200,000			hrs

#### **ENVIRONMENTAL**

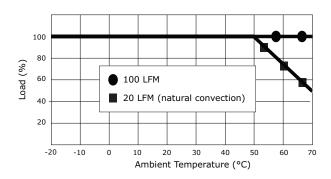
parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-20		70	°C
storage temperature		-20		85	°C
operating humidity	non-condensing			93	%

# **MECHANICAL**

parameter	conditions/description	min	typ	max	units
dimensions	127.00 x 76.20 x 26.67 (5.00 x 3.00 x 1.05 inch)				mm
weight				270	g
cooling method	free air convection (see derating curves below)				

# **DERATING CURVES**

#### output power vs. ambient temperature



#### **MECHANICAL DRAWING**

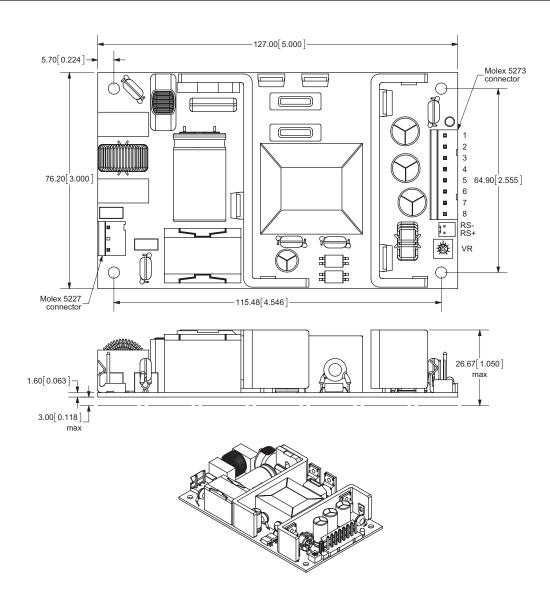
units: mm [inch] tolerance: mm: ±0.5

inch: ±0.02

CN1				
1	AC Line			
2	No pin			
3	AC Neutral			

	CN2				
1	-Vo				
2	-Vo				
3	-Vo				
4	-Vo				
5	+Vo				
6	+Vo				
7	+Vo				
8	+Vo				

CN3					
RS-	Remote Voltage Sense -				
RS+	Remote Voltage Sense +				



1. All specifications measured at 25°C, 115/230Vac input voltage, and 75% load unless otherwise noted.

#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	11/03/2011
1.01	V-Infinity branding removed	08/22/2012
1.02	updated spec	07/22/2013

The revision history provided is for informational purposes only and is believed to be accurate.



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CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

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