

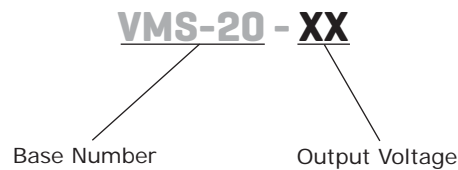
**SERIES: VMS-20 | DESCRIPTION: AC-DC POWER SUPPLY**
**FEATURES**

- up to 21.6 W continuous power
- compact size
- universal input (90 ~ 264 Vac)
- single output from 3.3 to 24 V
- no load power < 0.3W
- over voltage and short circuit protections
- full medical safety approvals
- efficiency up to 85%


**V-Infinity**


MODEL	output voltage	output current	output power	ripple and noise <sup>1</sup>	efficiency
	(Vdc)	max (A)	max (W)	max (mVp-p)	typ (%)
VMS-20-3.3	3.3	4.0	13.2	50	75
VMS-20-5	5	4.0	20.0	50	80
VMS-20-9	9	2.3	20.7	90	81
VMS-20-12	12	1.7	20.4	100	83
VMS-20-15	15	1.4	21.0	100	84
VMS-20-24	24	0.9	21.6	100	85

Notes: 1. Measured at 20MHz, with 0.1uF ceramic and 10uF electrolytic capacitors

**PART NUMBER KEY**


**INPUT**

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
input current				0.5	A
inrush current	at 230 Vac, cold start at 25 °C			40	A

**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	%
hold-up time	115 Vac		10		ms
switching frequency			100		KHz

**PROTECTIONS**

parameter	conditions/description	min	typ	max	units
over voltage protection		115		140	%
short circuit protection	continuous				

**SAFETY & COMPLIANCE**

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output	5,656			Vdc
safety approvals	UL60601-1, IEC60601-1, EN60601-1				
EMI/EMC	EN60601-1/EN61204-3/EN55022/CISPR Class B, EN55024				
leakage current				0.1	mA
RoHS compliant	yes				
MTBF	MIL-HDBK-217F, GB	400,000			hrs

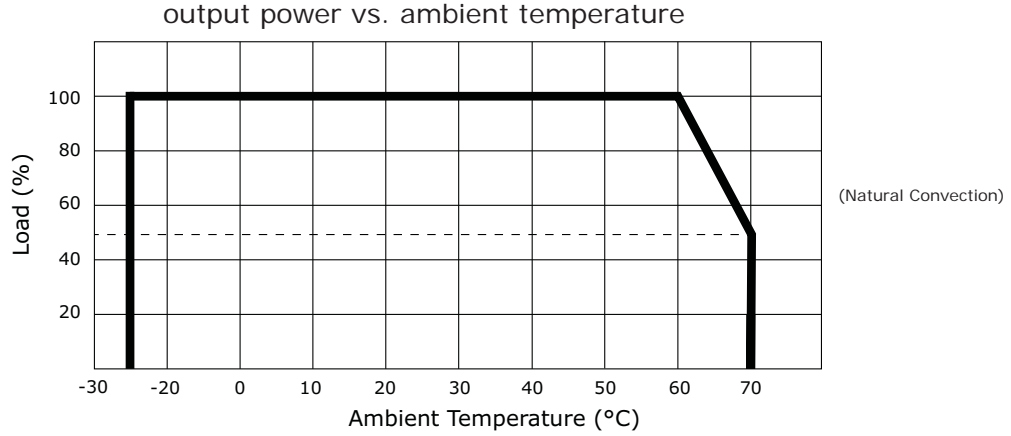
**ENVIRONMENTAL**

parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-25		70	°C
storage temperature		-40		85	°C
operating humidity	non-condensing			93	%

**MECHANICAL**

parameter	conditions/description	min	typ	max	units
dimensions	2.38 x 1.60 x 0.80 (60.5 x 40.6 x 20.4 mm)				inch
weight				50	g
cooling method	free air convection (see derating curves below)				

## DERATING CURVES

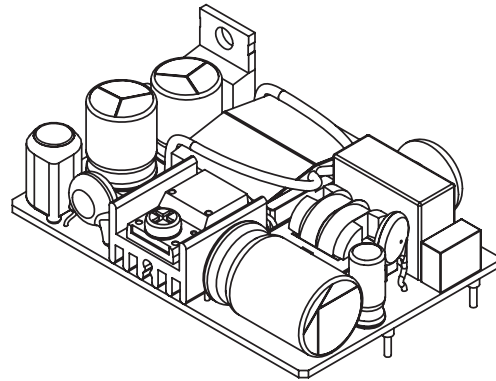
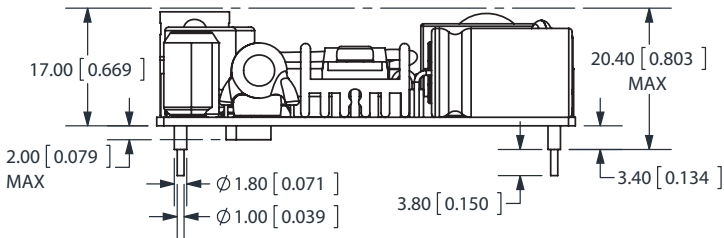
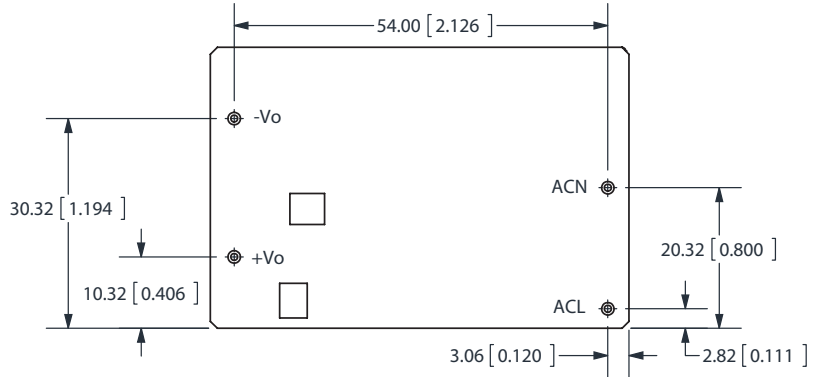
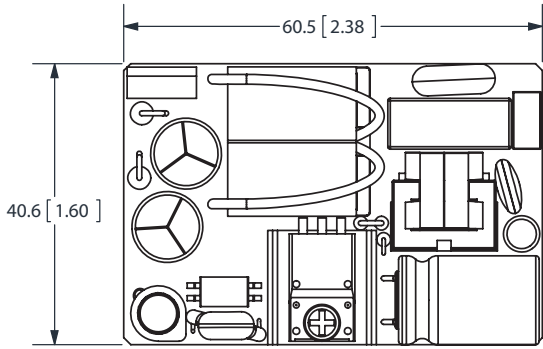


## MECHANICAL DRAWING

units: mm[in]

TOLERANCE: mm: X.X = ±0.5 ; X.XX = ±0.25

inch: X.XX = ±0.02 ; X.XXX = ±0.01



## REVISION HISTORY

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rev.	description	date
1.0	initial release	10/26/2011

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



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