

Preliminary

11/9/99

Product Specification AC Voltage Sensor with DC Output

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Model number VDM480-5VDC-60Hz

Absolute stress above which the unit may be damaged.	Min	Max	unit
Device temperature	-80	120	°C
Instantaneous input voltage		2000	V-peak
Continuous input voltage		1000	V-rms
Shock (any axis)		2500	g

Range over which calibration is guaranteed.	Min	Typ	Max	unit
Ambient temperature	-40		80	°C
Frequency	59	60	61	Hz
Total harmonic distortion of the sensed voltage			10	%
Vibration (1Hz-10kHz)			200	g
Applied voltage	384		576	V-rms

Operating parameters.	Min	Typ	Max	unit
Output resistance (Note 1)			2.50	k
Isolation	4500			V-rms
Output at 480 volt input. (nominal)	4.98	5.00	5.03	VDC
Output at 384 volt input. (- 20%)	3.96	4.00	4.04	VDC
Output at 576 volt input. (+ 20%)	5.94	6.00	6.06	VDC
Thermal coefficient		.030	.060	% / °C
Time constant		150		mS
Slope factor		10.42		mV/V
Linearity (Note 2)			0.5	%
Power dissipation		384		mW

Physical	Min	Typ	Max	Unit
Depth		0.800		inch
Length		2.205		inch
Width		2.000		inch
Weight		230		grams
Flammability	Self extinguishing			

Note 1 Units are calibrated with a 1 M load.

Note 2 Linearity is defined as the maximum deviation from the best fitting straight line passing through the nominal output between $\pm 20\%$ of nominal expressed as a fraction of the nominal output. The slope factor is the geometric slope of that line which does not pass through (0,0).

<http://www.srt-inc.com/>

sales@srt-inc.com

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Smith Research & Technology, Inc.



3109 N. Cascade Ave., Bldg. #201
Colorado Springs, CO 80907-5190
719 634 2259, FAX 719 634 2601