

Product Specification

SPECIFICATION FOR 5VDC OUTPUT AC CURRENT SENSOR

Model number

CQ45-2.5A-5VDC-60HZ

Absolute stress above which the unit may be damaged.	Min.	Max.	unit
Ambient temperature	-40	80	°C
Measured current (monotonic but not linear above rating)		7.5	A-rms max
Shock (any axis)		2500	g

Range over which operation is guaranteed.	Min.	Max.	unit
Ambient temperature	-5	70	°C
Frequency	59	61	Hz
Total harmonic distortion of sensed current (Note 2)		3.0	percent
Vibration (1Hz-10kHz)		200	g

Operating parameters.	Min.	Typ.	Max.	unit
Input current	0.0	2.5	3.0	A-rms
Output voltage	0	5.0	6.0	V dc
Output impedance (Note 1)		296.0		k
Load impedance, undamaged 0 to load (Note 1)	0		Infinity	
Sensor internal resistance		211.0		k
Thermal coefficient, potting B		-0.029		%/°C
Rise time constant		220		msec
Fall time constant		260		msec

Physical	Min.	Typ.	Max.	unit
Current wire hole size		0.5	0.5	inch
Depth		0.5		inch
Height		1.4		inch
Width		1.5		inch
Weight		35		grams
Polarized output wire leads		12		inch
Flammability, 94 V-O, self extinguishing				

Note 1 Sensors are calibrated with 500 k ± 2% //300 pf. instrumentation capacity.

Note 2 Sensor response nearly identical for all waveforms; sine, square, or triangle (except triacs).

Note 3 The sensor output impedance is approx. 300k // 1uf.

Note 4 Maximum output current obtained by dividing output volts by sensor internal resistance.

Note 5 Sensors are powered by current being measured.

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Inductive AC voltage and current sensors