

SERIES CT

Current Transformer

DESCRIPTION

Series CT has been designed to compliment T & M's full line of current measurement devices. These CT's have features that have not been available until now.

SPECIFICATIONS

Characteristics for Model #CT6.5-685-5-100 are given with different load resistance.

Load in ohms	Volts per amp	Droop % per	IT amp-time	Low freq. cutoff Hz	Imax/freq. amps/hertz	Max RMS current	ohm reflected to primary
		microsec.					
50	.5	.05	0.023	91	0,148	28.28	.005
25	.25	.029	0.047	46	0,297	40.00	.0025
10	.1	.012	0.117	19	0,739	63.25	.001
5	.05	.0059	0.230	9	1,45	89.44	.0005
2.5	.025	.0031	0.446	5	2,80	126.49	.0003
1	.01	.0013	1.02	2	6,40	200.00	.0001
.5	.005	.00077	1.78	1.2	11,2	282.84	.00007
.25	.0025	.0048	2.85	.76	17,9	400.00	.00004
.1	.001	.00031	4.45	.49	27,9	632.46	.00003
.05	.0005	.00025	5.48	.39	34.4	894.43	.00002
.025	.00025	.00022	6.19	.35	38.9	1264.91	.00002
.01	.0001	.00020	6.71	.32	42.1	2000.00	.00002
.005	.00005	.00019	6.91	.31	43.3	2828.43	.00002
.0025	.000025	.00019	7.00	.31	44.0	4000.00	.00002
.001	.00001	.00019	7.07	.31	44.4	6324.56	.00002

Output connector is type "N"; an adapter to 'BNC' is supplied with each CT.

Load resistor may be any of those listed above; sold separately. The load resistor should be chosen to obtain the desired output voltage. In most cases an output between 100 millivolt to 10 volts peak is best.

Output termination should be 50 ohms to eliminate unwanted cable reflections. Most oscilloscope plug-ins are 50 ohms. Output voltage ratio to current through the primary circuit can be determined by dividing the last number of the CT's part number by the load resistor.

Rise time obtainable from this type of device is dependent on the insertion method. When inserting this device using coaxial air line a rise time of less than 2 nanoseconds is obtainable. Using a single wire a rise time of less than 10 nanoseconds can be obtained. Note that there is no ringing or overshoot from these devices when measuring very fast signals unlike other products making these CT's very useful when measuring currents with rise time close to the upper limit of these CT's.

Volts per amp is the output given by the CT with the indicated load resistor for one amp flowing in the primary circuit.

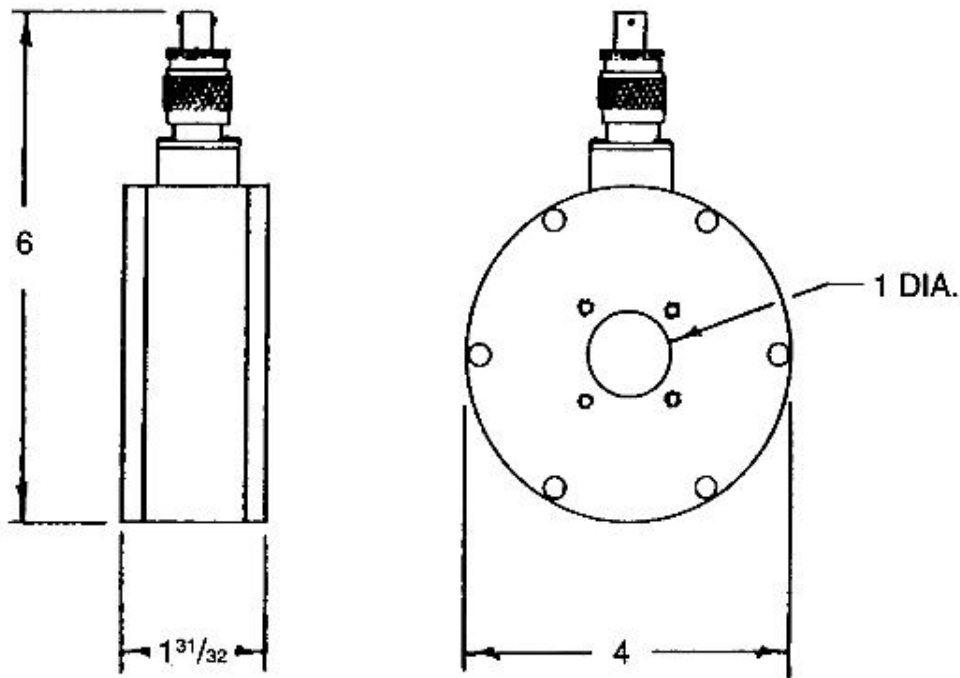
Droop % per microsec is the percentage drop of output for a square wave pulse after one microsecond.

I T product (amp-time) is the maximum signal rating for a given load resistor. This value should not be exceeded. To find this number multiply the current in amps by the total time of the test. The maximum peak current is limited only by the voltage across the output connector.

Low frequency cut-off point is the lowest frequency the CT can respond to for a given load resistor.

I max/freq. (amps/hertz) is the maximum current for a sine wave signal. Max RMS current is maximum steady state sine wave current that the load resistor can handle without overheating.

Ohms reflected to primary is the load placed on the primary circuit by having the CT inserted in the circuit.



ORDERING INFORMATION

When ordering specify model number and load resistor separately.

Example: CT 6.5-685-5-100, CTN-10. This specifies a CT with one 10 Ohm load resistor

Manufactured under license agreement # 43L-2992 with General Electric Company, USA

Patents: 3,629,693 & 3,701,003

Weitere Informationen, Beratung, Verkauf und technische Betreuung:

mem Messtechnik & Elektronik GmbH

Telefon: 08071 923060 FAX: 08071 9230619

Pilartzstr. 9

mail@mem-gmbh.de

83549 Eisinging

www.mem-gmbh.de