High Ratio Vertical PCB Mount Current Transformer

CR Magnetics **CR8300** series of PCB Mounted Current Transformers are available in a wide range of sizes and materials to meet any AC current sensing needs. Our **General Purpose** designs are made from the highest quality silicon steel cores available, and meet most of the common AC current measurement needs. Our **Revenue Grade** CTs (**-N**) are made from a nickel alloy core which provides the most linear response over temperature and current level. The **High Frequency** (**-F**) products are designed for high frequency applications such as high frequency power supplies and motor drives. CR Magnetics offers **DC Immune** (**-D**) models that are designed to provide sensing of AC currents where DC offsets also exist. All products are offered in standard sizes, with the most popular turns ratios. UL, CSA, CE, and RoHS acceptance are all standard.

CR8300 SERIES



GENERAL PURPOSE VERTICAL PCB CURRENT TRANSFORMERS					
lr	Vmax RMS	Te	FREQUENCY		
10	1.0	1613	20 -1KHz		
20	5.0	1023	20 -1KHz		
50	10.2	2046	20 -1KHz		
50	6.8	1016	20 -1KHz		
75	10.3	1520	20 -1KHz		
100	10.7	1021	20 -1KHz		
200	14.6	2037	20 -1KHz		
	10 20 50 50 75	Ir Vmax RMS 10 1.0 20 5.0 50 10.2 50 6.8 75 10.3 100 10.7	Ir Vmax RMS Te 10 1.0 1613 20 5.0 1023 50 10.2 2046 50 6.8 1016 75 10.3 1520 100 10.7 1021		

REVENUE GRADE VERTICAL PCB CURRENT TRANSFORMERS

Part Number	lr	Vmax RMS	Te	FREQUENCY
CR8348-2500-N	40	2.3	2510	20 -1KHz
CR8349-1000-N	50	2.4	1009	20 -1KHz
CR8349-2500-N	75	4.8	2512	20 -1KHz
CR8350-2500-N	100	7.2	2511	20 -1KHz

HIGH FREQUENCY VERTICAL PCB CURRENT TRANSFORMERS

Part Number	lr	Vmax RMS	Te	FREQUENCY
CR8348-2000-F	50	9.2	2022	20KHz-200KHz
CR8349-2000-F	75	10.2	2024	20KHz-200KHz
CR8350-2000-F	100	12.7	2027	20KHz-200KHz

DC IMMUNE VERTICAL PCB CURRENT TRANSFORMERS

Part Number	lr	Vmax RMS	Te	FREQUENCY
CR8348-2000-D	50	2.5	2015	20 -1KHz
CR8349-2000-D	75	3.5	2017	20 -1KHz
CR8350-2000-D	100	4.8	2020	20 -1KHz

 I_r = Maximum Input Current to be linearly sensed V_{max} = Maximum Linear Voltage (Saturation) CT will develop at I_r T_{a} = Effective turns ratio including losses

PACKAGE AND PIN OUT DIMENSIONS (mm/in)								
Part Number Prefix	A min	B max	C max	D max	E ± 0.3	F ± 0.3	G ± 0.3	H typ
CR8320	5.5 .22	19.6 .77	20.0 .79	8.6 .34	12.7 .50	N/A	N/A	N/A
CR8348	6.9	23.5	25	11	15.24	9.5	19.05	1.90
	.27	.93	.98	.43	.60	.37	.75	.07
CR8349	9	26	28	17	15.00	15.5	19	2.00
	.35	1.02	1.10	.67	.59	.61	.75	.079
CR8350	12.8	37.5	39	14	25.4	12.7	33.02	3.81
	.50	1.48	1.54	.55	1.00	.50	1.30	.15

Applications

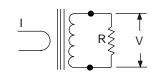
- Motor Load Measurement
- Power Meters
- High Frequency Current Sensing

Features

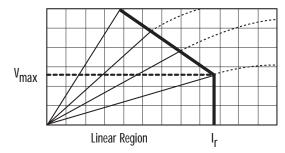
- · High Ratio
- Standard Footprints

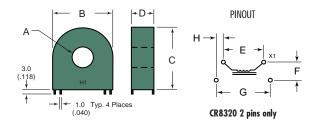
Specifications

- Maximum Continuous Primary Current 4 X Ir
- UL, CSA, CE, and RoHS available



$$V = \frac{I \times R}{T_e}$$







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