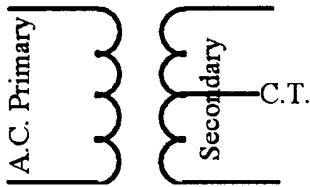


TRANSFORMERS

Center-tapped, power supply or filament transformers.



Primary wires are black, secondary are red with green insulation on the center tap.

Transformer voltage will vary with the circuit load; or: how much will be drawn by the circuit following the power supply. The following transformers will produce the “rated” voltage when loaded near its rated maximum current. Example: a 12 Volt transformer with a 120 VAC input will have an output around twenty volts A.C. when no load is attached. When a “test load” that draws close to the rated current is attached to the secondary, the output will be very close to the rated voltage.

For reference, in the chart (below) we show the voltage at the secondary with no load and also with a resistive load that will draw the maximum rated current. Philmore transformers’ “catalog voltage” is generally the target voltage that can be expected after rectification, allowing for voltage drop through diodes.

Finally, it is common practice to use a power supply that can deliver twice the current that the circuit will require during its operational average current usage. See the Notes section on next page.

The chart below shows not only the “catalog” voltage rating, but open circuit (no load) voltages and full load voltages for each transformer. The full, or “resistive load” is the value connected across the secondary, and the Output VAC w/load is the actual voltage from the test transformer. Any transformer will heat up considerably if constantly run at the full current rating.

The “W” is the width of the frame and the “D” is the depth dimension measured at widest part of the coil.

Part Number	Rated (catalog) Voltage	Rated Current In mA	Secondary VAC with no load	Resistive load in Ohms	Output VAC w/load	Mounting hole center to center	Height (Inches)	W/D (Inches)
TR004	4.5	300	5.5	15	4.7	1.90"	1.20	1.47/1.3
TR006	6	300	7.4	20	6.3	1.90"	1.20	1.47/1.3
TR012	12.6	300	17.45	42	13.5	1.90"	1.24	1.47/1.3
TR015	15	300	21.0	50	15.4	1.90"	1.27	1.47/1.3
TR025	25.2	450	34.5	56	26.6	2.0"	1.4	1.69/1.6
TR030	6	500	7.82	12	6.72	2.05"	1.41	1.69/1.42
TR034	9	500	11.75	20	9.98	2.08"	1.4	1.7/1.5
TR038	12	500	16.02	24	12.98	2.08"	1.4	1.7/1.5
TR106	6	1000	7.86	6.8	7.05	2.30"	1.7	1.97/1.58
TR121	12	1000	15.5	13.8	13.3	2.30"	1.7	1.97/1.62
TR215	15	1000	19.64	15	15.82	2.30"	1.7	1.97/1.55
TR241	24	1000	31.0	27	25.8	2.30"	1.7	1.95/1.96
TR212	12	2000	14.9	6.8	13.0	2.70"	2.0	2.3/1.8
TR250	12.6	3000	15.1	4.4	13.78	3.20"	2.28	2.79/2.39
TR218	18	2000	23.4	9.6	18.98	2.80"	1.95	2.3/1.8