

SERIES

PTxxxR PT



Power Toroids - Horizontal or Vertical Mount

Inductance tested at 1 kHz, <10 gauss and 0 ADC

DC Resistance at 25°C

Rated Idc based on 40°C maximum rise from 25°C ambient with 0 Arms

Windings single layered to maximize operating frequency and minimize board space

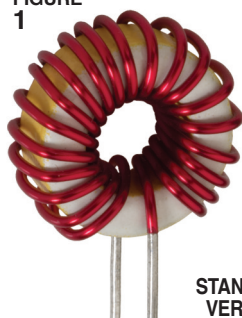
Self leads solder coated to within 0.050" of seating plane

Other values available on request

Packaging Bulk only

Mounting Standard mounting is self-lead radial per Figure "1". Optional mounting methods are self-leaded horizontal per Figure "2" or vertical base mounted per Figures "3" and "4".

FIGURE
1



STANDARD
VERTICAL

FIGURE
2



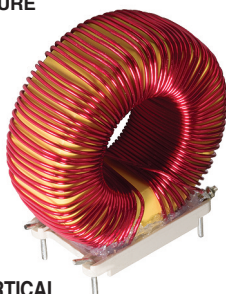
HORIZONTAL

FIGURE
3



VERTICAL
2-LEAD

FIGURE
4



VERTICAL
4-LEAD

*Complete part # must include series # PLUS the dash #

For surface finish information,
refer to www.delevanfinishes.com

Power Inductors

MOUNTING AVAILABLE

FIG. "1" STANDARD VERTICAL

HORIZONTAL

FIG. "3" 2-LEAD VERTICAL

FIG. "4" 4-LEAD VERTICAL

DASH NUMBER*

IND. (μH) ±15% @ 1 kHz

DCR MAXIMUM (OHMS)

RATED IDC (AMPS)

PT SERIES POWER TOROIDS							
PT5-530	5	0.015	6.1	•	•	•	
PT5-700	5	0.012	7.4	•	•	•	
PT5-800	5	0.010	10.6	•	•	•	
PT5-1000	5	0.008	12.8	•	•	•	
PT10-530	10	0.020	4.9	•	•	•	
PT10-680	10	0.015	6.8	•	•	•	
PT10-820	10	0.010	9.3	•	•	•	
PT10-990	10	0.008	13.2	•	•	•	
PT25-680	25	0.035	4.4	•	•	•	
PT25-800	25	0.025	6.6	•	•	•	
PT25-900	25	0.020	7.0	•	•	•	
PT25-1000	25	0.014	10.4	•	•	•	
PT50-780	50	0.050	3.8	•	•	•	
PT50-900	50	0.030	5.6	•	•	•	
PT50-1020	50	0.025	7.0	•	•	•	
PT50-1320	50	0.020	11.0	•	•	•	
PT75-900	75	0.060	3.9	•	•	•	
PT75-980	75	0.040	5.2	•	•	•	
PT75-1260	75	0.035	7.4	•	•	•	
PT75-1550	75	0.025	10.6	•	•	•	
PT100-1000	100	0.080	3.5	•	•	•	
PT100-1100	100	0.050	5.1	•	•	•	
PT100-1260	100	0.035	7.8	•	•	•	
PT100-1550	100	0.028	10.3	•	•	•	
PT150-1040	150	0.100	3.4	•	•	•	
PT150-1250	150	0.060	5.7	•	•	•	
PT150-1500	150	0.050	7.7	•	•	•	•
PT150-2050	150	0.040	12.3	•	•	•	•
PT250-1200	250	0.130	3.8	•	•	•	•
PT250-1500	250	0.080	6.1	•	•	•	•
PT250-1800	250	0.055	9.1	•	•	•	•
PT300-1200	300	0.150	3.3	•	•	•	•
PT300-1500	300	0.100	5.5	•	•	•	•
PT300-1750	300	0.075	7.3	•	•	•	•
PT400-1200	400	0.250	2.4	•	•	•	•
PT400-1500	400	0.180	4.7	•	•	•	•
PT400-1750	400	0.110	6.0	•	•	•	•
PT500-1450	500	0.220	3.4	•	•	•	•
PT500-1750	500	0.160	5.0	•	•	•	•
PT500-2000	500	0.090	8.0	•	•	•	•
PT750-1400	750	0.350	2.6	•	•	•	•
PT750-1700	750	0.280	3.7	•	•	•	•
PT750-2050	750	0.150	6.4	•	•	•	•
PT1000-1400	1000	0.620	1.8	•	•	•	•
PT1000-1750	1000	0.420	3.1	•	•	•	•
PT1000-2050	1000	0.200	5.9	•	•	•	•

Notes to Figure 5 (Page 100) The PT Toroid Series inductance is specified at AC and DC signal levels which have no significant effect on the permeability of the powdered iron toroidal core. Superimposed AC and DC voltages will change the permeability and therefore the inductance, under operating conditions. Typically, DC currents will reduce the inductance, while AC signals will increase the inductance up to a point, before beginning to decrease. Supporting information is provided, detailing the AC or DC effects upon each part. Saturation resulting from DC currents is specified with waveform having less than a 1% ripple content. When considering the AC waveform, both the frequency and voltage level must be taken into account. As an aid in defining what effect the alternating sine wave signal will have, the voltage/frequency factor curve can be used. To determine what change of inductance can be expected at a given voltage level and frequency, simply divide the sinusoidal RMS voltage by the frequency. The voltage is in volts and the frequency is in hertz. As an example, if using part number PT25-680 at a 1VRMS signal level, and a frequency of 25KHz, the voltage/frequency factor is calculated to be: 1VRMS/25,000Hz = 40 x 10⁻⁶. Referring to the graph, a 39% increase in inductance would be expected.

Notes to Figure 6 (Page 100) Typical saturation effects as a function of DC flowing through the part. Data is representative of a DC waveform with less than 1% ripple, and an AC waveform less than 10 gauss.

Note This information is intended to be used in assisting the designer in part selection. Each operating application may contain other variables which must be considered in part selection; such as temperature effects, waveform distortion, etc.... Delevan Sales/Engineering staff is available to provide information as needed to fit each application.



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