

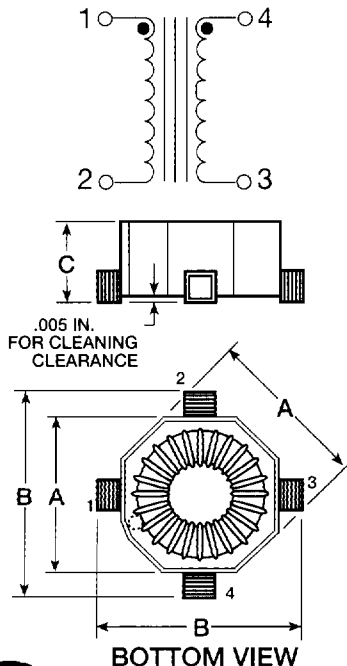
SMT POWER INDUCTOR/TRANSFORMERS

OCTA-PACs and ECONO-PACs are versatile surface mount magnetic devices that can be individually used in design applications as single inductors, dual inductors, or 1:1 transformers providing isolation between the two windings. OCTA-PACs offer wide-band frequency response in all configurations to 1 megaHertz. ECONO-PACs, lower cost versions of OCTA-PACs incorporating powdered iron cores, deliver frequency responses to several megaHertz.

Both products may be used in many engineering applications depending on their connection (see reverse side for Connection Diagrams). When used as inductors, they provide low inductance with high current if wired in parallel, or high inductance with lower current if wired in series. When used as 1:1 transformers, they provide electrical isolation and extremely wide voltage transformation in the flyback mode.

OCTA-PACs and ECONO-PACs are designed for easy use in any SMT sub-assembly manufacturing process. Supplied in tape and reel packaging, their cases make them ideal "pick-and-place" devices, and each pin #1 is marked for clear identification. OCTA-PACs and ECONO-PACs are suitable for normal exposure to infrared reflow soldering procedures.

Coiltronics designs and manufactures standard and custom product electromagnetic components. Contact the factory or your Coiltronics representative with your transformer and inductor requirements.



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OCTA-PAC

COILTRONICS PART NUMBER	PARALLEL RATINGS			SERIES RATINGS			ENERGY μ J	A Inches	B Inches	C MAX Inches	WEIGHT GRAMS
	INDUCTANCE μ H	CURRENT ADC	DCR OHMS	INDUCTANCE μ H	CURRENT ADC	DCR OHMS					
CTX2-1	2.0	4.11	0.009	8	2.06	0.035	17	.350	.450	.165	1.0
CTX5-1	5.0	2.32	0.027	20	1.16	0.109	13				
CTX8-1	8.0	2.05	0.035	32	1.03	0.140	17				
CTX10-1	10.0	1.94	0.039	40	0.97	0.155	19				
CTX20-1	20.0	1.03	0.137	80	0.52	0.547	11				
CTX33-1	33.0	0.72	0.279	132	0.36	1.116	9				
CTX50-1	50.0	0.65	0.349	200	0.33	1.395	11				
CTX68-1	68.0	0.54	0.507	272	0.27	2.029	10				
CTX82-1	82.0	0.46	0.690	328	0.23	2.762	9				
CTX100-1	100.0	0.44	0.763	400	0.22	3.053	10				
CTX200-1	200.0	0.37	1.078	800	0.19	4.312	14				
CTX2-2	2.0	4.56	0.009	8	2.28	0.035	21				
CTX5-2	5.0	3.06	0.022	20	1.53	0.088	23				
CTX8-2	8.0	2.68	0.026	32	1.34	0.104	29				
CTX10-2	10.0	2.51	0.030	40	1.26	0.120	32				
CTX15-2	15.0	1.79	0.058	60	0.90	0.232	24				
CTX20-2	20.0	1.32	0.106	80	0.66	0.426	17				
CTX33-2	33.0	1.46	0.087	132	0.73	0.348	35				
CTX50-2	50.0	0.93	0.213	200	0.47	0.850	22				
CTX68-2	68.0	0.78	0.310	272	0.39	1.239	21				
CTX82-2	82.0	0.66	0.429	328	0.33	1.717	18				
CTX100-2	100.0	0.63	0.470	400	0.32	1.881	20				
CTX300-2	300.0	0.38	1.278	1200	0.19	5.112	22				
CTX2-3	2.0	4.78	0.010	8	2.39	0.038	23	.450	.550	.180	1.3
CTX5-3	5.0	3.05	0.023	20	1.53	0.094	23				
CTX8-3	8.0	2.99	0.023	32	1.50	0.091	36				
CTX10-3	10.0	2.85	0.027	40	1.43	0.108	41				
CTX15-3	15.0	2.28	0.040	60	1.14	0.160	39				
CTX20-3	20.0	1.53	0.093	80	0.77	0.374	23				
CTX33-3	33.0	1.68	0.077	132	0.84	0.307	47				
CTX50-3	50.0	0.95	0.242	200	0.48	0.968	23				
CTX68-3	68.0	0.88	0.280	272	0.44	1.119	26				
CTX82-3	82.0	0.84	0.307	328	0.42	1.226	29				
CTX100-3	100.0	0.80	0.339	400	0.40	1.355	32				
CTX300-3	300.0	0.48	0.939	1200	0.24	3.757	35				
CTX2-4	2.0	5.92	0.008	8	2.96	0.031	35	.450	.550	.180	1.3
CTX5-4	5.0	4.40	0.015	20	2.20	0.061	48				
CTX8-4	8.0	3.87	0.018	32	1.94	0.073	60				
CTX10-4	10.0	3.72	0.021	40	1.86	0.084	69				
CTX15-4	15.0	3.37	0.025	60	1.69	0.101	85				
CTX20-4	20.0	2.19	0.059	80	1.10	0.236	48				
CTX25-4	25.0	2.03	0.065	100	1.02	0.259	52				
CTX33-4	33.0	1.91	0.073	132	0.96	0.293	60				
CTX50-4	50.0	1.55	0.114	200	0.78	0.455	60				
CTX68-4	68.0	1.28	0.163	272	0.64	0.651	56				
CTX75-4	75.0	0.99	0.277	300	0.50	1.106	37				
CTX100-4	100.0	0.92	0.319	400	0.46	1.276	42				
CTX150-4	150.0	0.83	0.390	600	0.42	1.560	52				
CTX250-4	250.0	0.65	0.637	1000	0.33	2.549	53				
CTX300-4	300.0	0.62	0.700	1200	0.31	2.800	58				

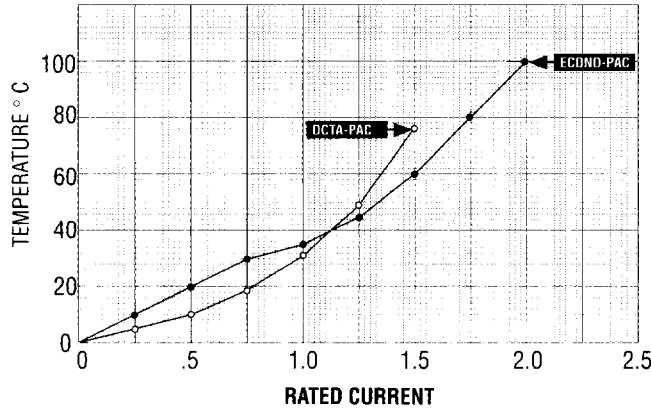
ECONO-PAC

CTX2-1P	2.0	3.220	0.007	8.0	1.610	0.028	10	.350	.450	.165	1.0				
CTX5-1P	5.0	1.830	0.021	20.0	0.915	0.085	8								
CTX8-1P	8.0	1.630	0.027	32.0	0.815	0.107	11								
CTX10-1P	10.0	1.570	0.030	40.0	0.785	0.119	12								
CTX15-1P	15.0	1.240	0.046	60.0	0.620	0.185	12								
CTX20-1P	20.0	0.950	0.081	80.0	0.475	0.325	9								
CTX33-1P	33.0	0.730	0.135	132.0	0.365	0.541	9								
CTX50-1P	50.0	0.660	0.167	200.0	0.330	0.669	11								
CTX100-1P	100.0	0.490	0.297	400.0	0.245	1.190	12								
CTX150-1P	150.0	0.400	0.458	600.0	0.200	1.831	12								
CTX200-1P	200.0	0.330	0.649	800.0	0.165	2.596	11								
CTX2-2P	2.0	3.750	0.006	8.0	1.875	0.025	14					.450	.550	.180	1.3
CTX5-2P	5.0	2.300	0.017	20.0	1.150	0.067	13								
CTX8-2P	8.0	2.030	0.021	32.0	1.015	0.084	16								
CTX10-2P	10.0	1.980	0.022	40.0	0.990	0.090	20								
CTX15-2P	15.0	1.390	0.045	60.0	0.695	0.181	14								
CTX20-2P	20.0	1.300	0.052	80.0	0.650	0.208	17								
CTX50-2P	50.0	0.730	0.163	200.0	0.365	0.651	13								
CTX82-2P	82.0	0.580	0.263	328.0	0.290	1.052	14								
CTX100-2P	100.0	0.550	0.292	400.0	0.275	1.167	15								
CTX300-2P	300.0	0.370	0.631	1200.0	0.185	2.525	21								
CTX2-3P	2.0	4.150	0.006	8.0	2.075	0.026	17	.450	.550	.180	1.3				
CTX5-3P	5.0	2.540	0.017	20.0	1.270	0.068	16								
CTX8-3P	8.0	2.540	0.017	32.0	1.270	0.069	26								
CTX10-3P	10.0	2.360	0.020	40.0	1.180	0.080	28								
CTX15-3P	15.0	1.960	0.028	60.0	0.980	0.114	29								
CTX20-3P	20.0	1.440	0.053	80.0	0.720	0.213	21								
CTX50-3P	50.0	0.820	0.168	200.0	0.410	0.673	17								
CTX100-3P	100.0	0.680	0.238	400.0	0.340	0.951	23								
CTX300-3P	300.0	0.470	0.519	1200.0	0.235	2.074	33								
CTX2-4P	2.0	4.540	0.006	8.0	2.270	0.025	21					.450	.550	.180	1.3
CTX5-4P	5.0	3.150	0.013	20.0	1.575	0.051	25								
CTX8-4P	8.0	2.840	0.016	32.0	1.420	0.063	32								
CTX10-4P	10.0	2.400	0.022	40.0	1.200	0.090	29								
CTX15-4P	15.0	1.990	0.033	60.0	0.995	0.130	30								
CTX20-4P	20.0	1.820	0.039	80.0	0.910	0.155	33								
CTX25-4P	25.0	1.520	0.055	100.0	0.760	0.222	29								
CTX33-4P	33.0	1.260	0.080	132.0	0.630	0.320	26								
CTX50-4P	50.0	1.150	0.097	200.0	0.575	0.390	33								
CTX100-4P	100.0	0.680	0.274	400.0	0.340	1.097	23								
CTX150-4P	150.0	0.550	0.429	600.0	0.275	1.717	23								
CTX250-4P	250.0	0.540	0.434	1000.0	0.270	1.735	36								
CTX300-4P	300.0	0.520	0.479	1200.0	0.260	1.915	41								

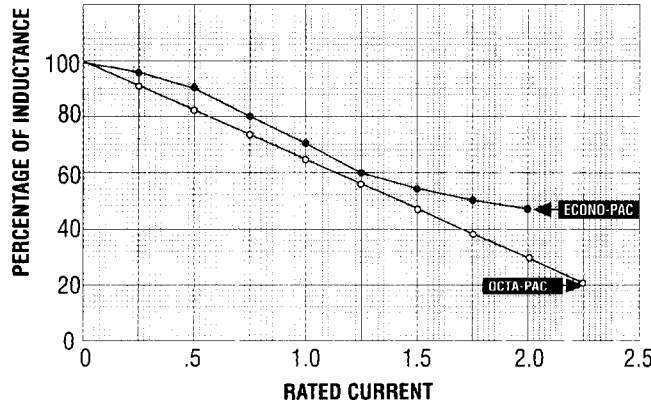
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PERFORMANCE CHARACTERISTICS

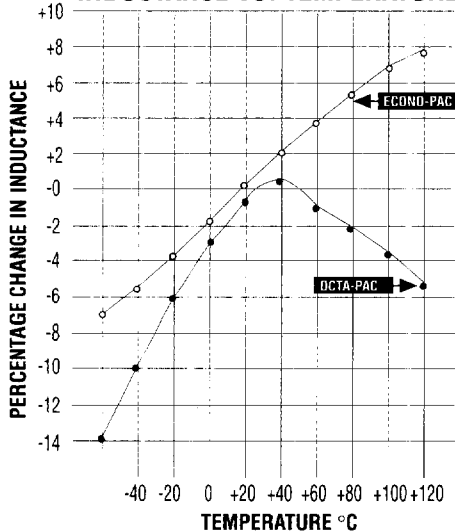
RATED CURRENT VS. TEMPERATURE



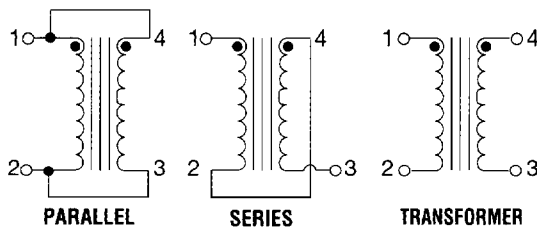
INDUCTANCE VS. CURRENT



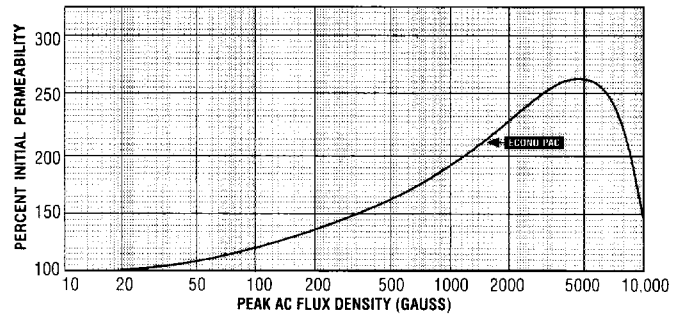
INDUCTANCE VS. TEMPERATURE



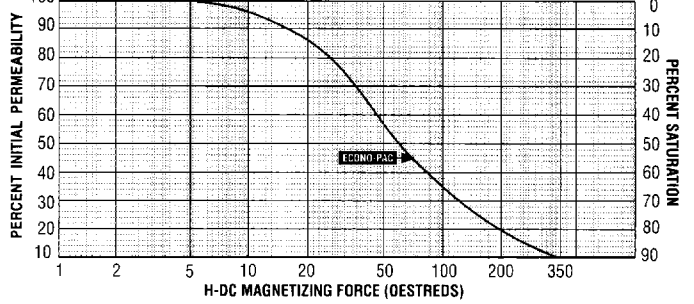
CONNECTION DIAGRAMS



PERCENT INITIAL PERMEABILITY VS. PEAK AC FLUX DENSITY



PERCENT INITIAL PERMEABILITY VS. DC MAGNETIZING FORCE



- Inductance vs. Current:**
 Inductance will fall off as DC Current is increased. (See Inductance vs. Current graph).
- Inductance vs. Frequency:**
 Inductance roll-off versus Frequency approximates 3% at 1 megaHertz, 20% at 10 megaHertz, and approaches 50% at 100 megaHertz.
- Frequency Response:**
 Wide-band frequency response to 1 megaHertz.
- Current Limitation:**
 The maximum allowable currents are defined by the internal "hot-spot" temperatures which are limited to 130°C, including ambient.

Specifications are typical and subject to change without notice.

RECOMMENDED LAYOUT PATTERN (TOP VIEW)

Case Size	D	E	F	G
-1	.277	.422	.392	.145
-2	.277	.422	.392	.145
-3	.348	.492	.492	.160
-4	.348	.492	.492	.160

All dimensions in inches, typical

Case Size	Quantity Per Reel
-1	1100
-2	800
-3	800
-4	600

OCTA-PACs and ECONO-PACs are available in Tape and Reel packaging. The number of devices per reel is dependent on the case size of the device.

ENVIRONMENTAL SPECIFICATIONS

- Storage Temperature Range:**
 -40°C to +125°C
- Operating Ambient Temperature Range:**
 -40°C to +85°C
 Range is application specific
- Infrared Reflow Temperature:**
 +240°C for 30 seconds maximum