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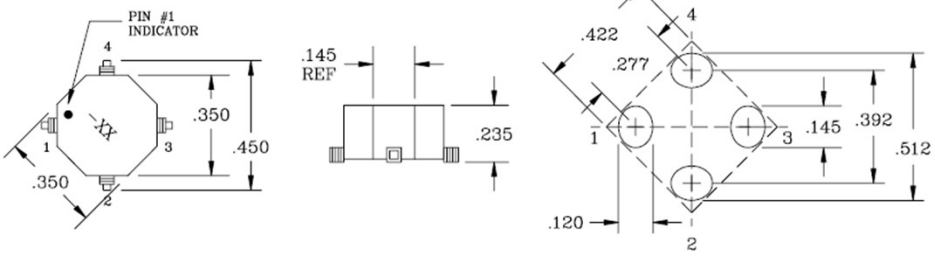
SMD Power Inductors and Transformers 8409-XX

INDUCTORS: low inductance with high current when wired in parallel or higher inductance with lower current when wired in series
TRANSFORMERS: (1:1) electrical isolation and a wide voltage transformation

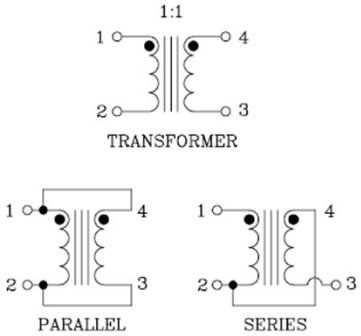
- Extended temperature range –40°C to +85°C
- Isolation voltage: 300 Vdc

MECHANICAL AND SCHEMATIC (All dimensions in inches)

SUGGESTED PAD LAYOUT



SCHEMATICS



ELECTRICAL SPECIFICATIONS @ 25°C

Part Number	Rated Inductance (µH)	Parallel Ratings				Series Ratings			
		OCL[1] Nominal ±25% (µH)	Isat.[2] (A)	Irms.[3] (A)	DCR[4] @20°C (Ω typ.)	OCL[1] Nominal ±25% (µH)	Isat.[2] (A)	Irms.[3] (A)	DCR[4] @20°C (Ω typ.)
8409-01	0.33	0.284	18.8	10.9	0.0033	1.14	9.38	5.47	0.0132
8409-02	0.68	0.675	12.5	9.4	0.0045	2.70	6.25	4.68	0.0180
8409-03	1.0	1.26	9.38	8.22	0.0058	5.06	4.69	4.11	0.0233
8409-04	2.0	1.98	7.50	6.74	0.0090	7.90	3.75	3.37	0.035
8409-05	5.0	5.06	4.69	4.34	0.021	20.22	2.34	2.17	0.084
8409-06	8.0	7.90	3.75	3.50	0.032	31.60	1.88	1.75	0.129
8409-07	10.0	11.38	3.13	2.89	0.047	45.50	1.56	1.45	0.188
8409-08	15.0	15.48	2.68	2.69	0.054	61.94	1.34	1.35	0.218
8409-09	20.0	20.22	2.34	2.24	0.078	80.90	1.17	1.12	0.313
8409-10	25.0	25.60	2.08	1.89	0.111	102.38	1.04	0.94	0.443
8409-11	33.0	34.84	1.79	1.56	0.162	139.4	0.89	0.78	0.649
8409-12	50.0	49.38	1.50	1.28	0.240	197.5	0.75	0.64	0.961
8409-13	68.0	66.44	1.29	1.07	0.342	265.8	0.65	0.54	1.367
8409-14	100.0	102.38	1.04	0.75	0.695	409.5	0.52	0.38	2.778
8409-15	150.0	152.9	0.85	0.68	0.842	611.8	0.43	0.34	3.366
8409-16	200.0	197.5	0.75	0.64	0.950	790.0	0.38	0.32	3.800
8409-17	300.0	303.7	0.60	0.58	1.174	1215	0.30	0.29	4.697

1. Measured @ 100kHz, 0.250Vrms, 0.0Adc Parallel (1,4 – 3,2); Series (1–3) tie (2–4)
2. Peak current for approximately 30% roll-off
3. RMS current, delta temp. of 40°C ambient temperature of 85°C
4. Values @ 20°C, Maximum DCR is +15% of typical value
5. Turns Ratio: (1-2):(4-3) 1:1