

The EPL-3000 series of inductors are built on quartz in order to provide low loss and high Q in a tiny 0303 package. These inductors exhibit excellent electrical performance up to 10GHz and provide inductance ranging from 0.7nH to 22.5nH. The method of construction gives consistent physical characteristics from lot-to-lot and thus has repeatable performance which makes it ideal for many applications such as matching networks, amplifiers, filters, voltage controlled oscillators, harmonic suppressors, and etc.

PART NUMBER	L(nH) TYP	@ 1 GHz		@ 2 GHz		@ 3 GHz		SRF(GHz) TYP	I _{dc} (mA)	
		L(nH) TYP	Q TYP	L(nH) TYP	Q TYP	L(nH) TYP	Q TYP		ΔT = 20	ΔT = 80
EPL-3000-1	0.7	0.7	7	0.7	13	0.7	18	+30.00	151	301
EPL-3000-1R5	1.1	1.1	9	1.1	17	1.1	26	+30.00	114	228
EPL-3000-2	1.8	2.1	11	2.1	20	2.1	34	+30.00	92	185
EPL-3000-2R5	2.8	3.3	13	3.3	24	3.3	40	21.8	80	161
EPL-3000-3	4.0	4.6	14	4.6	26	4.6	43	15.30	71	143
EPL-3000-3R5	5.3	6.2	15	6.2	28	6.3	47	15.00	65	129
EPL-3000-4	6.9	7.0	21	7.1	39	7.3	67	10.70	59	117
EPL-3000-4R5	8.6	8.0	17	8.1	30	8.3	49	10.80	53	106
EPL-3000-5	10.5	12.5	19	12.9	33	13.6	52	6.85	49	98
EPL-3000-5R5	12.7	15.3	20	15.8	35	16.9	53	6.85	47	94
EPL-3000-6	16.2	18.3	21	19.2	36	21.2	53	5.90	44	88
EPL-3000-6R5	19.4	21.7	22	23.2	37	26.9	51	4.85	42	83
EPL-3000-7	22.5	25.5	22	27.6	37	33.3	49	4.90	39	79

MECHANICAL SPECIFICATIONS

* Units are mils [mm] unless otherwise specified

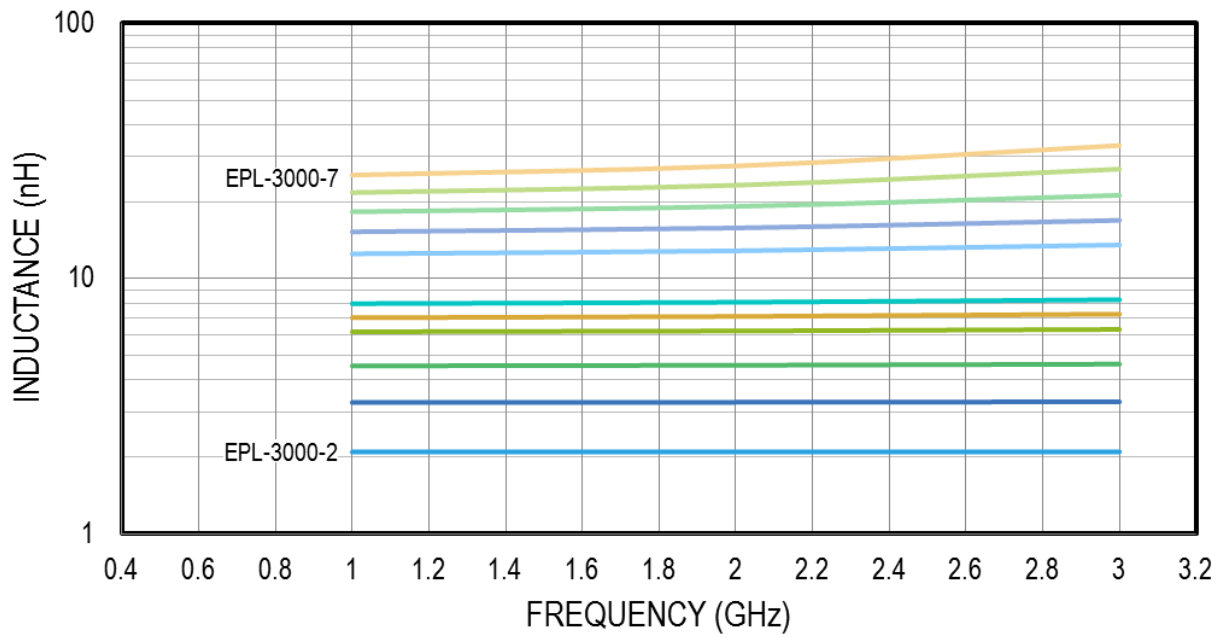


SINGLE DIE

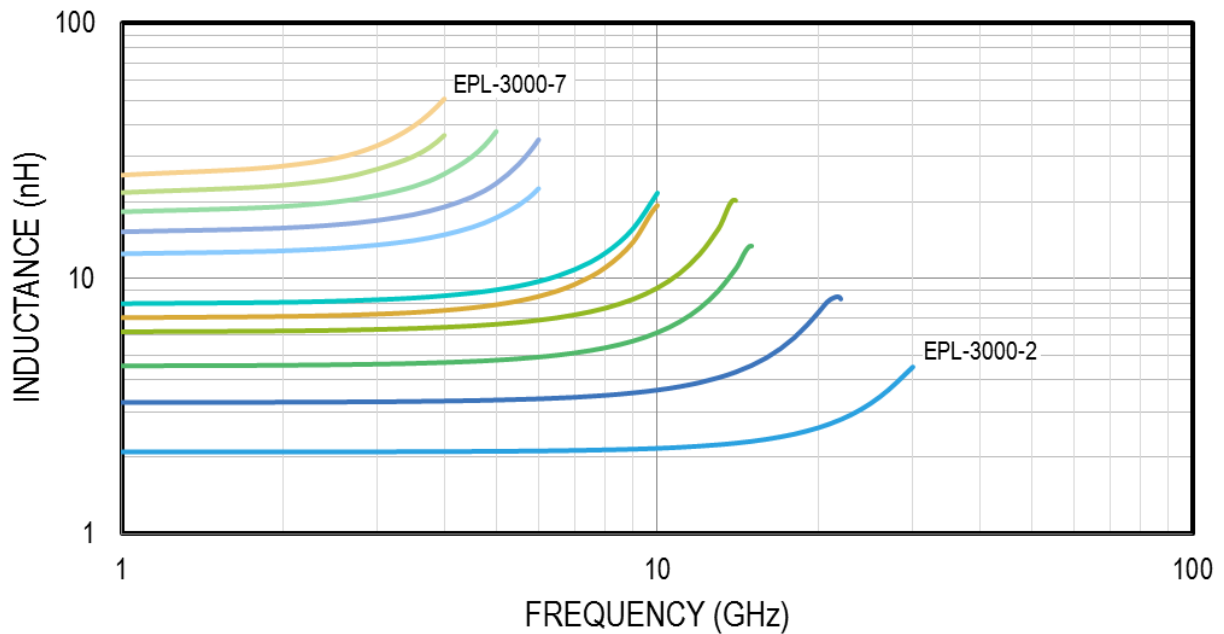
METALLIZATION Titanium / Platinum / Gold (Ti / Pt / Au)

ELECTRICAL SPECIFICATIONS

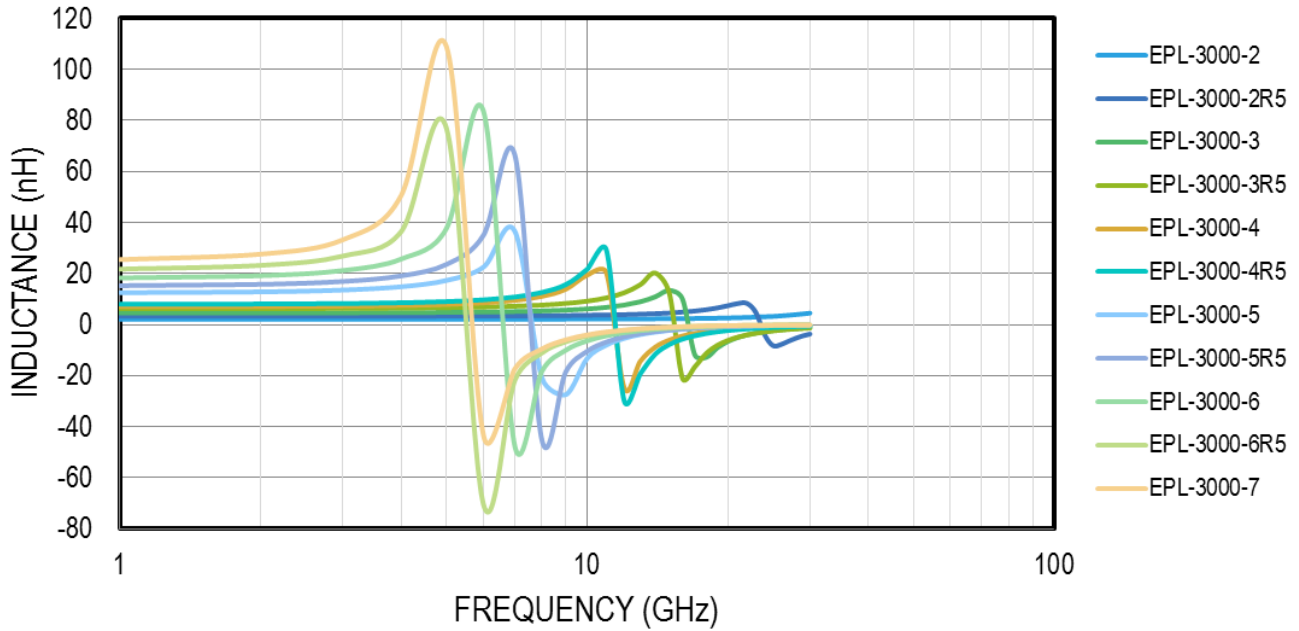
INDUCTANCE VS FREQUENCY TYPICAL



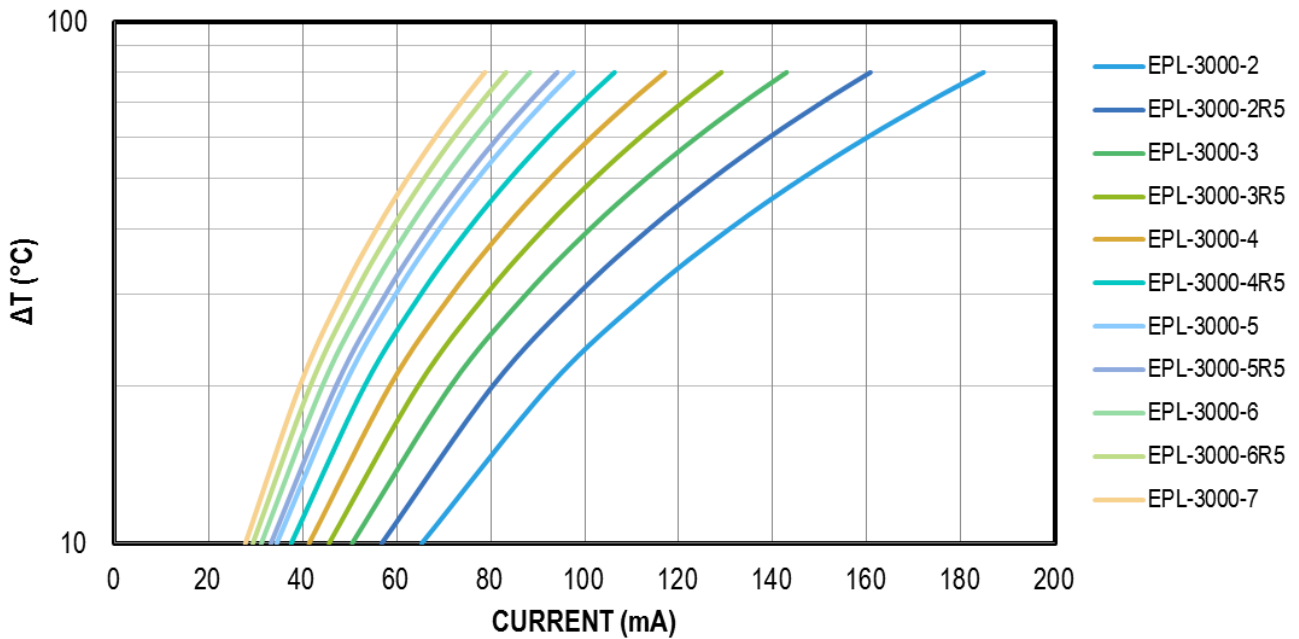
INDUCTANCE VS FREQUENCY TYPICAL

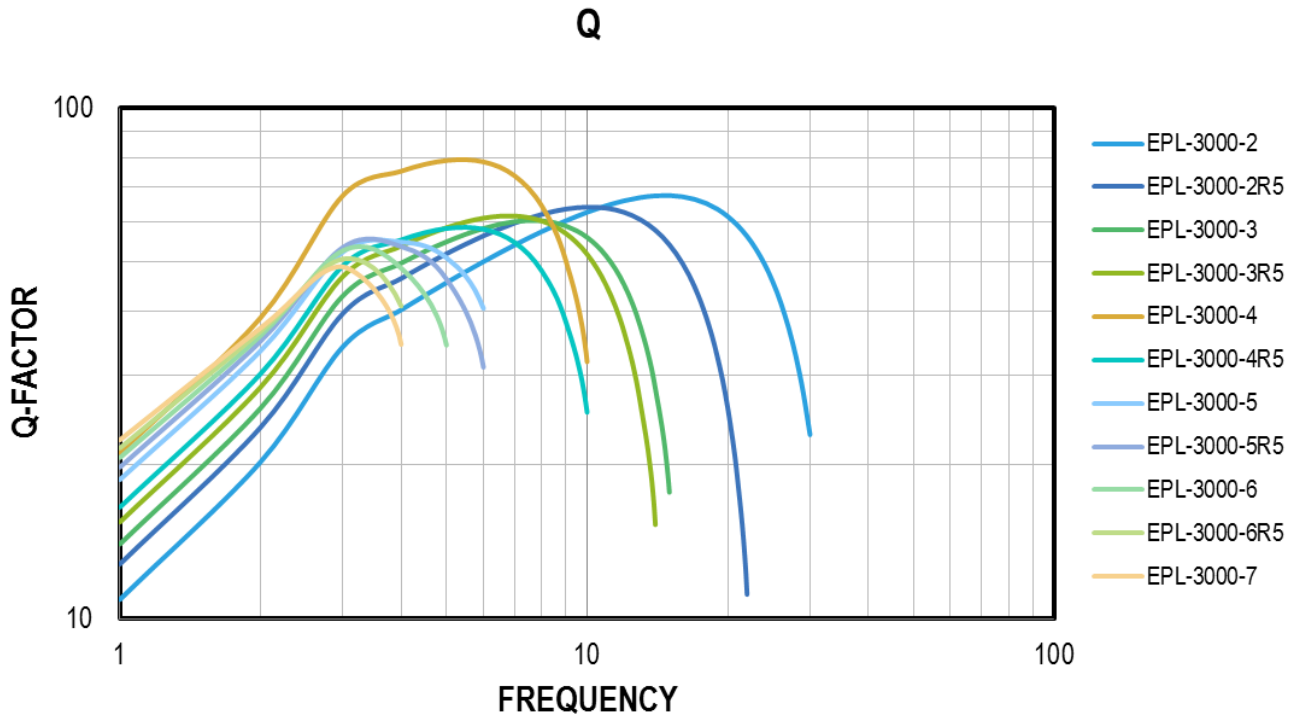


INDUCTANCE VS FREQUENCY TYPICAL



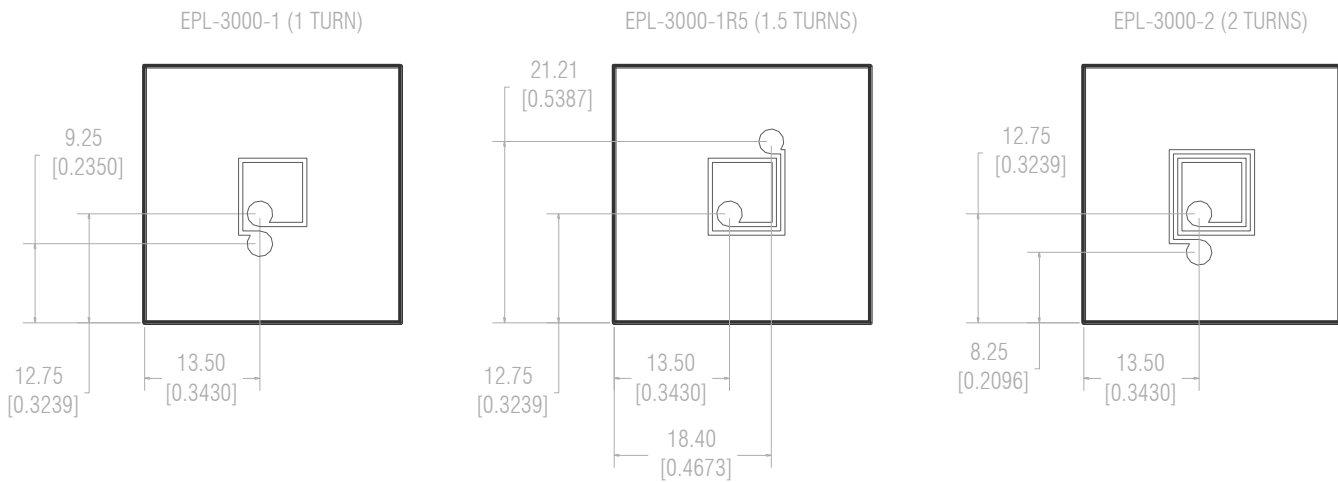
MAXIMUM TEMPERATURE RISE ABOVE 25°C AMBIENT



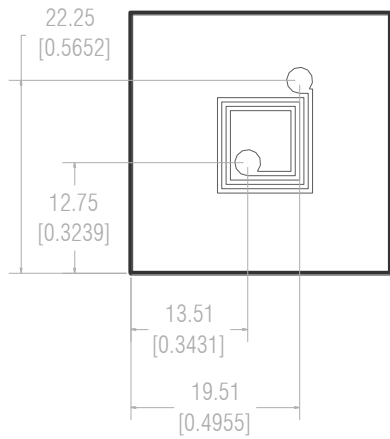


BONDING PADS

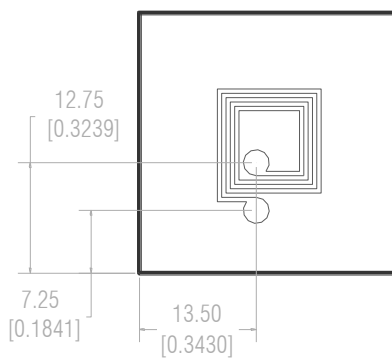
* Units are mils [mm] unless otherwise specified. Bond pads are 3 mils in diameter.



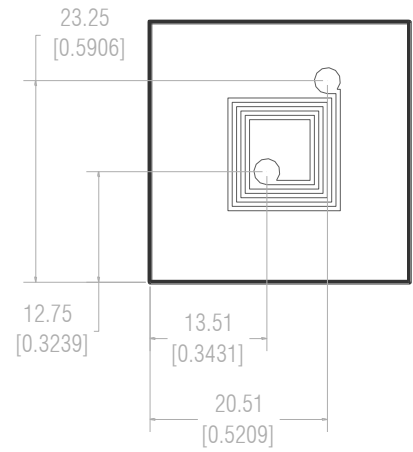
EPL-3000-2R5 (2.5 TURNS)



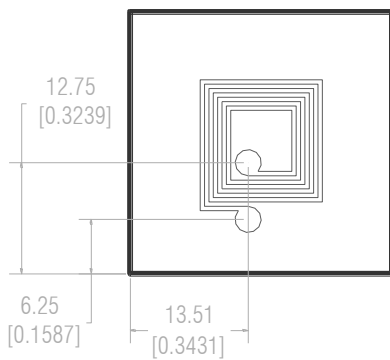
EPL-3000-3 (3 TURNS)



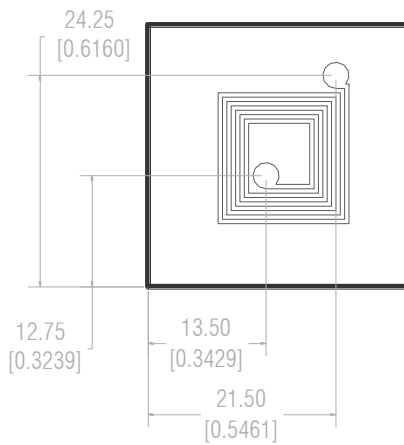
EPL-3000-3R5 (3.5 TURNS)



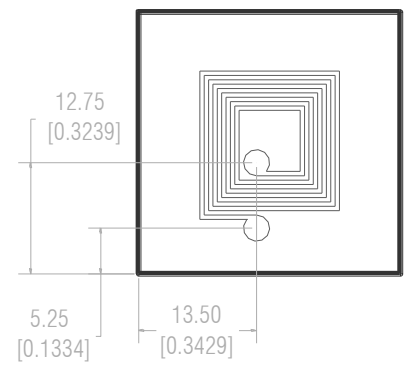
EPL-3000-4 (4 TURNS)



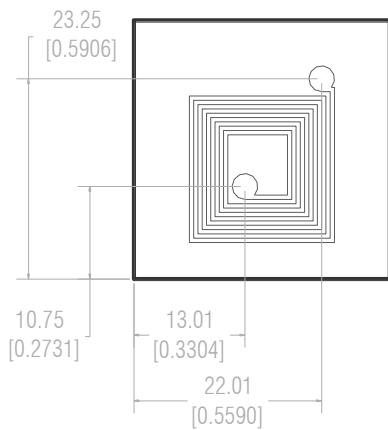
EPL-3000-4R5 (4.5 TURNS)



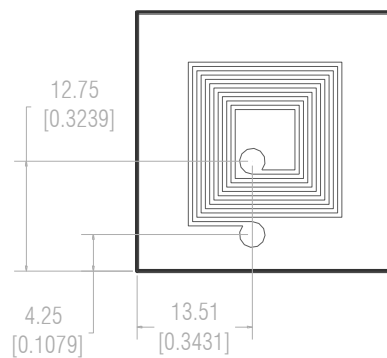
EPL-3000-5 (5 TURNS)



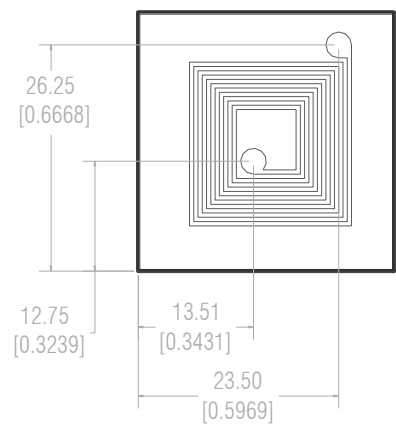
EPL-3000-5R5 (5.5 TURNS)

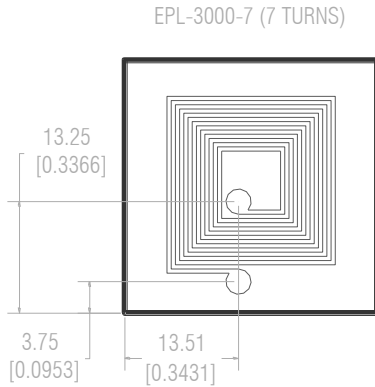


EPL-3000-6 (6 TURNS)



EPL-3000-6R5 (6.5 TURNS)





PACKAGING

Units are packaged and shipped in standard waffle packs.

ORDERING INFORMATION

EPL – 3000 –

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INDUCTOR SERIES	TURNS	PART NUMBER
	1 = 1	EPL-3000-1
	1.5 = 1R5	EPL-3000-1R5
	2 = 2	EPL-3000-2
	2.5 = 2R5	EPL-3000-2R5
	3 = 3	EPL-3000-3
	3.5 = 3R5	EPL-3000-3R5
	4 = 4	EPL-3000-4
	4.5 = 4R5	EPL-3000-4R5
	5 = 5	EPL-3000-5
	5.5 = 5R5	EPL-3000-5R5
	6 = 6	EPL-3000-6
	6.5 = 6R5	EPL-3000-6R5
	7 = 7	EPL-3000-7
	Design Kit = DK	EPL-3000-DK