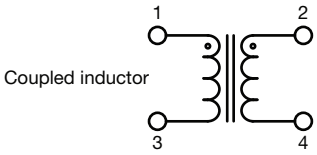
Coupled Ferrite Power Inductors, Dual-Winding



FEATURES

- 7.3 mm x 7.3 mm x 4.5 mm SMD package
- Highly coupled windings enable parallel, series and 1:1 transformer applications
- Magnetically shielded ferrite construction
- Inductance range: 0.8 µH to 1000 µH
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

HALOGEN FREE GREEN (5-2008)

APPLICATIONS

- SEPIC converters
- Common mode applications
- LED lighting
- Flyback 1:1 transformer

LINKS TO ADDITIONAL RESOURCES

Product Page

Calculators

STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	L_0 INDUCTANCE AT 0 A (µH)	DCR MAX. (Ω)	HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A) (2)	L_0 INDUCTANCE AT 0 A (µH)	DCR MAX. (Ω)	HEAT RATING CURRENT DC TYP. (A) (1)	SATURATION CURRENT DC TYP. (A) (2)
	PARALLEL				SERIES			
IFCL3030DEERR80N	0.8	0.0132	5.3	10.2	3.01	0.0528	2.7	5.1
IFCL3030DEER1R5N	1.5	0.0188	5.0	7.0	5.69	0.0752	2.5	3.8
IFCL3030DEER2R2N	2.2	0.0204	4.7	6.6	7.94	0.0816	2.3	3.4
IFCL3030DEER3R3N	3.3	0.0258	3.9	5.2	13.58	0.1032	2.0	2.5
IFCL3030DEER4R7N	4.7	0.0354	3.3	4.4	20.73	0.1416	1.7	2.2
IFCL3030DEER6R8N	6.8	0.0492	2.6	3.5	29.38	0.1968	1.3	1.8
IFCL3030DEER8R2N	8.2	0.0564	2.5	3.2	34.26	0.2256	1.3	1.6
IFCL3030DEER100M	10	0.0606	2.4	3.1	39.53	0.2424	1.2	1.5
IFCL3030DEER150M	15	0.0948	2.0	2.4	64.36	0.3792	1.0	1.2
IFCL3030DEER220M	22	0.1272	1.8	2.0	86.92	0.5088	0.9	1.0
IFCL3030DEER330M	33	0.2052	1.3	1.6	132.0	0.8208	0.7	0.8
IFCL3030DEER470M	47	0.294	1.1	1.3	198.6	1.176	0.5	0.7
IFCL3030DEER680M	68	0.4056	1.0	1.2	278.7	1.6224	0.5	0.6
IFCL3030DEER820M	82	0.492	0.8	1.1	323.8	1.968	0.4	0.6
IFCL3030DEER101M	100	0.5736	0.8	1.0	406.4	2.2944	0.4	0.5
IFCL3030DEER151M	150	0.8352	0.6	0.8	600.0	3.3408	0.3	0.4
IFCL3030DEER221M	220	1.2192	0.5	0.7	908.0	4.8768	0.3	0.3
IFCL3030DEER331M	330	2.172	0.4	0.5	1342.0	8.688	0.2	0.3
IFCL3030DEER471M	470	2.652	0.4	0.5	1861.0	10.608	0.2	0.2
IFCL3030DEER681M	680	4.248	0.3	0.4	2685.0	16.992	0.14	0.2
IFCL3030DEER821M	820	4.668	0.3	0.4	3251.0	18.672	0.13	0.2
IFCL3030DEER102M	1000	5.184	0.24	0.3	4036.0	20.736	0.12	0.16

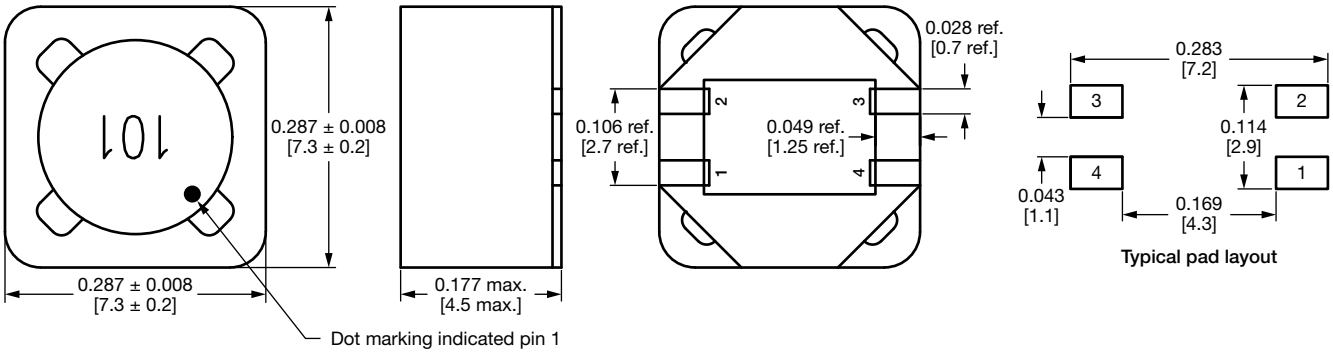
Notes

- All test data is referenced to 25 °C ambient
- Test condition: 100 kHz, 0.25 V
- Operating temperature range -40 °C to +125 °C (includes temperature rise due to self-heating)
- Storage temperature: -40 °C to +125 °C
- Resistance to solder heat: 260 °C peak for 10 s max.
- Winding to winding isolation voltage (1 to 2): 200 V_{AC}, 3 mA, 1 s

(1) DC current (A) that will cause an approximate ΔT of 40 °C

(2) DC current (A) that will cause L_0 to drop approximately 30 %

DIMENSIONS in inches [millimeters]



DESCRIPTION

IFCL-3030DE	6.8 µH	± 30 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

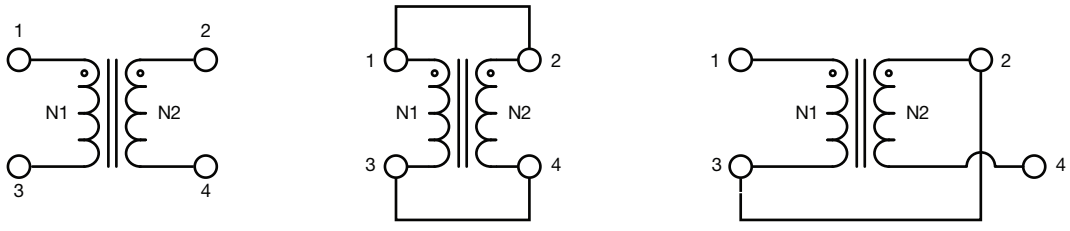
I	F	C	L	3	0	3	0	D	E	E	R	6	R	8	N
PRODUCT FAMILY				SIZE						PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE

ER = tape and reel

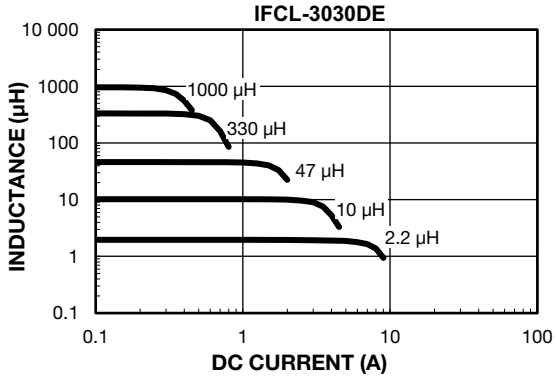
6R8 = 6.8 µH

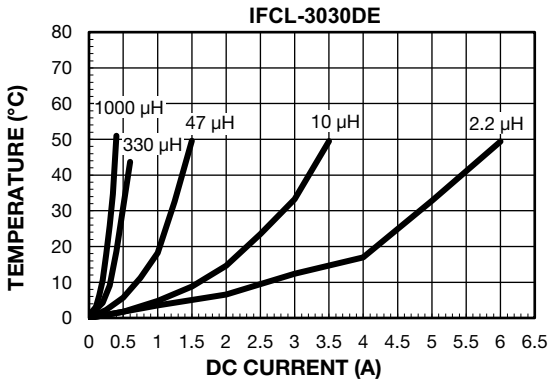
M = ± 20 %
N = ± 30 %

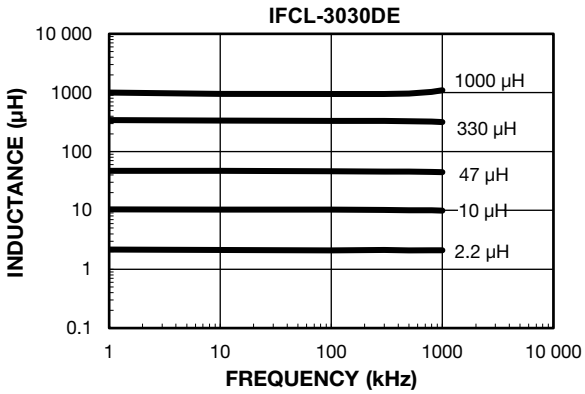
SCHEMATICS



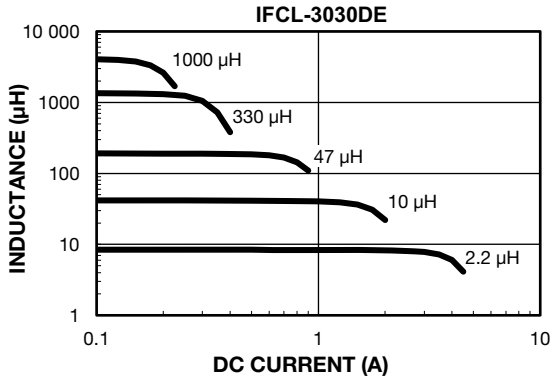
PERFORMANCE GRAPHS - PARALLEL

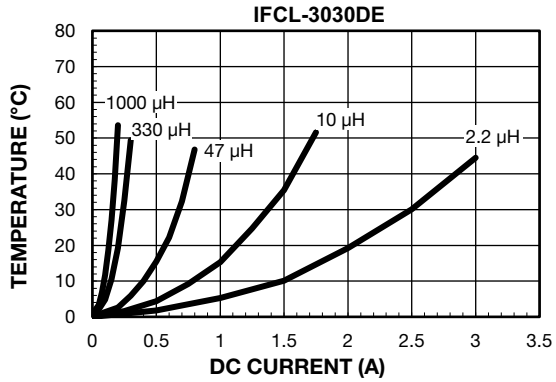


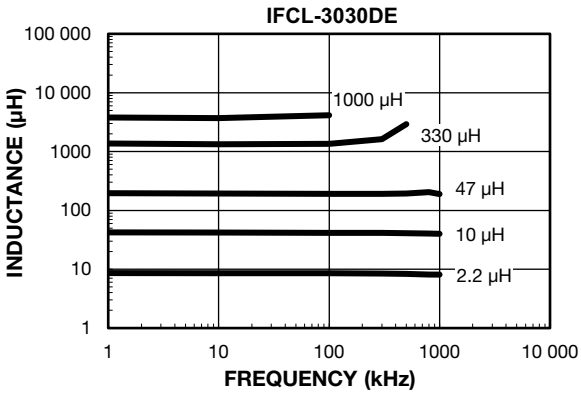




PERFORMANCE GRAPHS - SERIES







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