Inductors / Transformers Customizable, Surface-Mount Torodial, Kool-Mu®, Powdered Iron and MPP Cores

Note

- Kool Mu® is a registered trademark of Spang & Company

FEATURES

- Toroidal design for minimal EMI radiation in DC/DC converter applications
- Designed to support the growing need for efficient DC/DC converters in battery operated equipment
- Two separate windings provide versatility by ability to connect windings in series or parallel
- Dielectric withstanding voltage: 500 V_{RMS}, 60 Hz, 5 s
- Operating temperature range: -40 °C to +125 °C
- Supplied on tape and reel and is designed to be pick and place compatible
- Custom versions and turns ratios available. Contact the factory with your specifications
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS (in parallel)

MODEL	STD. IND. (µH)	IND. TOL.	ACTUAL IND. (LOC) (µH)	DCR (Ω)	RATED I_{DC} (40 °C) (A)	IND. AT I_{DC} (L_{BIAS}) (30 %)	
LPT4545ER1R0LK	1.0	± 15 %	0.832	0.003	6.90	0.51 at 7.62	KOOL MU® CORE (A)
LPT4545ER1R5LK	1.5	± 15 %	1.30	0.004	6.45	0.80 at 6.10	
LPT4545ER2R5LK	2.5	± 15 %	2.55	0.006	5.75	1.57 at 4.35	
LPT4545ER3R3LK	3.3	± 15 %	3.33	0.007	5.50	2.05 at 3.81	
LPT4545ER5R0LK	5.0	± 15 %	5.20	0.011	4.45	3.20 at 3.05	
LPT4545ER100LK	10	± 15 %	10.2	0.019	3.45	6.28 at 2.18	
LPT4545ER150LK	15	± 15 %	15.0	0.029	2.79	9.26 at 1.79	
LPT4545ER200LK	20	± 15 %	20.8	0.038	2.61	12.4 at 1.53	
LPT4545ER250LK	25	± 15 %	25.2	0.048	2.25	15.5 at 1.39	
LPT4545ER330LK	33	± 15 %	32.5	0.068	1.85	20.0 at 1.22	
LPT4545ER500LK	50	± 15 %	50.0	0.107	1.50	30.8 at 0.98	
LPT4545ER101LK	100	± 15 %	101	0.195	1.15	62.0 at 0.69	
LPT4545ER151LK	150	± 15 %	152	0.302	0.92	93.4 at 0.56	
LPT4545ER251LK	250	± 15 %	248	0.491	0.73	153.0 at 0.44	
LPT4545ER301LK	300	± 15 %	300	0.670	0.63	179.0 at 0.40	
LPT4545ER331LK	330	± 15 %	333	0.706	0.60	205.0 at 0.38	
LPT4545ER1R0LP	1.0	± 15 %	0.838	0.004	6.61	0.53 at 7.09	POWDERED IRON (B)
LPT4545ER1R5LP	1.5	± 15 %	1.21	0.005	6.08	0.76 at 5.91	
LPT4545ER2R5LP	2.5	± 15 %	2.71	0.009	5.01	1.71 at 3.94	
LPT4545ER3R3LP	3.3	± 15 %	3.35	0.012	4.22	2.11 at 3.54	
LPT4545ER5R0LP	5.0	± 15 %	5.66	0.019	3.32	3.57 at 2.73	
LPT4545ER100LP	10	± 15 %	10.9	0.034	2.52	6.84 at 1.97	
LPT4545ER150LP	15	± 15 %	14.8	0.049	2.10	9.31 at 1.69	
LPT4545ER250LP	25	± 15 %	26.3	0.084	1.61	16.5 at 1.27	
LPT4545ER330LP	33	± 15 %	34.3	0.119	1.34	21.6 at 1.11	
LPT4545ER500LP	50	± 15 %	51.0	0.180	1.09	32.1 at 0.91	
LPT4545ER101LP	100	± 15 %	105	0.342	0.81	66.2 at 0.63	
LPT4545ER151LP	150	± 15 %	150	0.509	0.66	94.7 at 0.53	
LPT4545ER251LP	250	± 15 %	248	0.831	0.52	156.0 at 0.41	
LPT4545ER331LP	330	± 15 %	335	1.194	0.43	211.0 at 0.35	
LPT4545ER1R0LM	1.0	± 15 %	0.838	0.004	7.54	0.54 at 11.11	MPP (C)
LPT4545ER1R5LM	1.5	± 15 %	1.30	0.004	6.82	0.84 at 8.89	
LPT4545ER2R5LM	2.5	± 15 %	2.55	0.007	5.84	1.64 at 6.35	
LPT4545ER3R3LM	3.3	± 15 %	3.33	0.008	5.49	2.14 at 5.56	
LPT4545ER5R0LM	5.0	± 15 %	5.20	0.012	4.37	3.35 at 4.45	
LPT4545ER100LM	10	± 15 %	10.2	0.022	3.32	6.56 at 3.18	
LPT4545ER150LM	15	± 15 %	15.0	0.033	2.69	9.68 at 2.61	
LPT4545ER250LM	25	± 15 %	25.2	0.054	2.12	16.2 at 2.02	
LPT4545ER330LM	33	± 15 %	32.5	0.076	1.76	20.9 at 1.78	
LPT4545ER500LM	50	± 15 %	50.0	0.119	1.41	32.2 at 1.43	
LPT4545ER101LM	100	± 15 %	101	0.219	1.07	64.8 at 1.01	
LPT4545ER151LM	150	± 15 %	152	0.340	0.86	97.7 at 0.82	
LPT4545ER251LM	250	± 15 %	248	0.551	0.67	159.0 at 0.64	
LPT4545ER331LM	330	± 15 %	333	0.788	0.56	214.0 at 0.56	

DESCRIPTION

LPT	4545	100 µH	± 15 %	A	ER	e2
MODEL	SIZE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	CORE / HEIGHT K = KOOL MU® (A) P = POWDERED IRON (B) M = MPP (C)	PACKAGE CODE ER = reel	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

L	P	T	4	5	4	5	E	R	1	0	1	L	K
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.	CORE

Note

- Series is also available with SnPb terminations by using package code RH for tape and reel (in place of ER)

For technical questions, contact: magnetics@vishay.com

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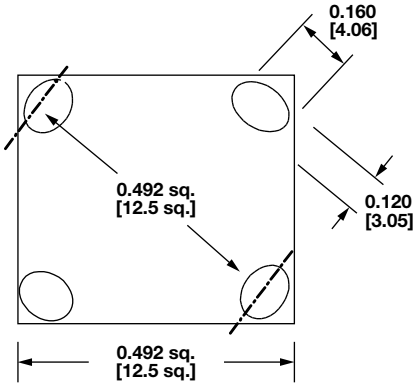
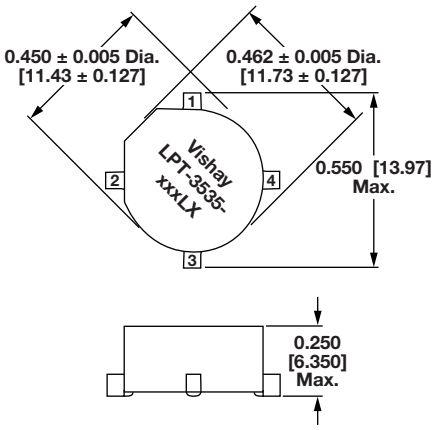
DIMENSIONS in inches [millimeters]

Pad Layout

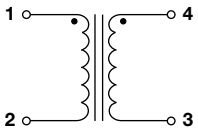


Dimensional Outline

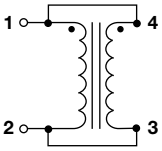


SCHEMATICS (connection diagrams)

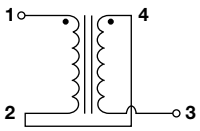
Transformer



Parallel



Series



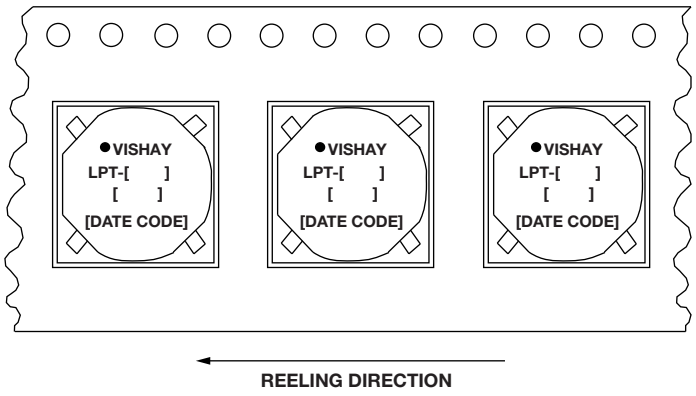
PART MARKING

- Vishay
- Model number
- Pin 1 identification

PACKAGING in inches [millimeters]

All embossed carrier tape packaging will be in compliance with the latest revision of EIA-481.

CARRIER TAPE WIDTH	PITCH	PARTS PER 13" [330.2] REEL
0.945 [24.0]	0.630 [16.0]	600



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