

Vishay Dale

Surface Mount, Multilayer High Frequency Ceramic Inductors



MECHANICAL SPECIFICATIONS

Solderability: 90 % coverage after 5 s dip in 235 °C solder following 60 s preheat at 120 °C and type R flux dip

Resistance to Solder Heat: 10 s in 260 °C solder, after

preheat and flux above

Terminal Strength: 0.6 kg (1.32 lbs) for 30 s

Termination: 100 % tin

Beam Strength: 1.0 kg (2.20 lbs)

Flex: 0.0788" [2.0 mm] min. mounted on 0.063" [1.6 mm]

thick PC board

FEATURES

- · High reliability
- Surface mountable
- Reflow or wave solderable
- Tape and reel packaging per EIA specifications:

4000 pieces on 7" reel

• Compliant to RoHS Directive 2002/95/EC

• Halogen-free according to IEC 61249-2-21 definition

COMPLIANT HALOGEN

FREE

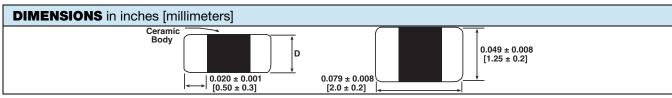
ENVIRONMENTAL SPECIFICATIONS

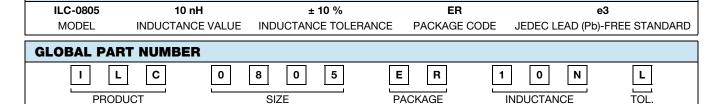
Operating Temperature: - 55 °C to + 125 °C Thermal Shock: 100 cycles, - 40 °C to + 85 °C

Humidity: + 40 °C, 85 % RH, 1000 h at full rated current

Load Life: 85 °C for 1000 h at full rated current

STANDARD ELECTRICAL SPECIFICATIONS													
DADT	IND.		THICKNESS "D"		TEST FREQ.		Q TYPICAL			SRF	(MHz)		RATED DC
PART NUMBER	(nH)	TOL.	(INCHES		(MHz)	Q MIN.	100 MHz	500 MHz	1000 MHz	MIN.	TYP.	MAX. (Ω)	CURRENT MAX. (mA)
ILC0805ER1N5S	1.5		0.035 ± 0.008		100	10	16	43	67	4000	7000	0.10	300
ILC0805ER1N8S	1.8	0.3 nH	0.035 ± 0.008	0.90 ± 0.2	100	10	16	56	59	4000	7000	0.10	300
ILC0805ER2N2S	2.2	0.3 nH	0.035 ± 0.008 [0.90 ± 0.2	100	10	16	40	58	4000	7000	0.10	300
ILC0805ER2N7S	2.7		0.035 ± 0.008		100	12	16	43	60	4000	6500	0.10	300
ILC0805ER3N3S	3.3	0.3 nH	0.035 ± 0.008	0.90 ± 0.2	100	12	19	52	70	4000	5500	0.13	300
ILC0805ER3N9S	3.9	0.3 nH	0.035 ± 0.008	0.90 ± 0.2	100	12	19	52	75	3000	4400	0.15	300
ILC0805ER4N7S	4.7	0.3 nH	0.035 ± 0.008	0.90 ± 0.2	100	12	19	53	70	3000	3500	0.20	300
ILC0805ER5N6S	5.6	0.3 nH	0.035 ± 0.008		100	15	19	53	70	3000	3500	0.23	300
ILC0805ER6N8J	6.8	5 %	0.035 ± 0.008 [100	15	19	44	60	2500	3300	0.25	300
ILC0805ER8N2J	8.2	5 %	0.035 ± 0.008 [100	15	19	45	60	2000	2600	0.28	300
ILC0805ER10NJ	10	5 %	0.035 ± 0.008		100	15	20	53	60	3000	2300	0.30	300
ILC0805ER12NJ	12	5 %	0.035 ± 0.008		100	15	20	36	45	1500	2000	0.35	300
ILC0805ER15NJ	15	5 %	0.035 ± 0.008 [100	15	20	46	45	1500	1800	0.40	300
ILC0805ER18NJ	18	5 %	0.035 ± 0.008		100	15	20	52	45	1300	1700	0.45	300
ILC0805ER22NJ	22	5 %	0.035 ± 0.008 [100	18	20	40	31	1200	1400	0.50	300
ILC0805ER27NJ	27	5 %	0.035 ± 0.008		100	18	20	44	29	1000	1300	0.55	300
ILC0805ER33NJ	33	5 %	0.035 ± 0.008		100	18	20	36	15	1000	1200	0.60	300
ILC0805ER39NJ	39	5 %	0.035 ± 0.008 [100	18	20	36	12	800	1100	0.65	300
ILC0805ER47NJ	47	5 %	0.035 ± 0.008 [100	18	21	33	12	800	1000	0.70	300
ILC0805ER56NJ	56	5 %	0.035 ± 0.008 [100	18	21	31	9	700	900	0.75	300
ILC0805ER68NJ	68	5 %	0.035 ± 0.008 [100	18	21	30	-	600	800	0.80	300
ILC0805ER82NJ	82	5 %	0.035 ± 0.008 [100	18	22	26	-	500	700	0.90	300
ILC0805ERR10J	100	5 %	0.035 ± 0.008		100	18	22	22	-	500	700	0.90	300
ILC0805ERR12J	120	5 %	0.035 ± 0.008		50	13	22	17	-	400	600	0.95	300
ILC0805ERR15J	150	5 %	0.035 ± 0.008 [50	13	22	9	-	300	600	1.00	300
ILC0805ERR18J	180	5 %	0.035 ± 0.008		50	13	21	8	-	300	500	1.10	300
ILC0805ERR22J	220	5 %	0.035 ± 0.008 [50	12	20	4	-	300	500	1.20	300
ILC0805ERR27J	270	5 %	0.035 ± 0.008	0.90 ± 0.2	50	12	24	17	-	200	400	1.30	300





FAMILY

DESCRIPTION

CODE

VALUE



Legal Disclaimer Notice

Vishay

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

Revision: 13-Jun-16 1 Document Number: 91000