



## Wirewound, Surface-Mount, Molded Inductors



## FEATURES

- Molded construction provides superior strength and moisture resistance
- Tape and reel packaging for automatic handling, 500/reel, EIA-481
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

RoHS  
COMPLIANT

## ELECTRICAL SPECIFICATIONS

Inductance range: 1  $\mu$ H to 680  $\mu$ HInductance tolerance:  $\pm 10\%$ 

Operating temperature: -40 °C to +125 °C

Storage temperature: -40 °C to +125 °C

## TEST EQUIPMENT

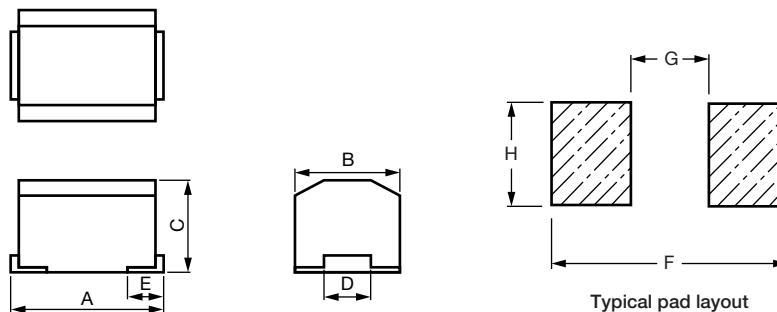
- L and Q: HP 4194A
- SRF: HP 4291A
- DCR: CH-502AC

## STANDARD ELECTRICAL SPECIFICATIONS

PART NUMBER	IND. ( $\mu$ H)	TOL. (%)	TEST FREQ. (MHz)	Q MIN.	SRF MIN. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (mA) <sup>(1)</sup>
			L AND Q				
IMCH1812ER1R0K	1.0	$\pm 10$	7.96	10	180	0.11	1050
IMCH1812ER1R2K	1.2	$\pm 10$	7.96	10	160	0.12	1000
IMCH1812ER1R5K	1.5	$\pm 10$	7.96	10	130	0.15	950
IMCH1812ER1R8K	1.8	$\pm 10$	7.96	10	100	0.16	900
IMCH1812ER2R2K	2.2	$\pm 10$	7.96	10	80.0	0.18	850
IMCH1812ER2R7K	2.7	$\pm 10$	7.96	10	60.0	0.20	800
IMCH1812ER3R3K	3.3	$\pm 10$	7.96	10	45.0	0.22	750
IMCH1812ER3R9K	3.9	$\pm 10$	7.90	10	40.0	0.24	700
IMCH1812ER4R7K	4.7	$\pm 10$	7.96	10	35.0	0.27	650
IMCH1812ER5R6K	5.6	$\pm 10$	7.96	10	30.0	0.3	650
IMCH1812ER6R8K	6.8	$\pm 10$	7.96	10	28.0	0.35	600
IMCH1812ER8R2K	8.2	$\pm 10$	7.96	10	25.0	0.4	600
IMCH1812ER100K	10	$\pm 10$	2.52	10	22.0	0.5	550
IMCH1812ER120K	12	$\pm 10$	2.52	10	21.0	0.6	500
IMCH1812ER150K	15	$\pm 10$	2.52	10	20.0	0.7	450
IMCH1812ER180K	18	$\pm 10$	2.52	10	19.0	0.8	400
IMCH1812ER220K	22	$\pm 10$	2.52	10	18.0	0.9	370
IMCH1812ER270K	27	$\pm 10$	2.52	10	16.0	1.2	330
IMCH1812ER330K	33	$\pm 10$	2.52	10	14.0	1.4	300
IMCH1812ER390K	39	$\pm 10$	2.52	10	12.0	1.6	280
IMCH1812ER470K	47	$\pm 10$	2.52	10	11.5	1.9	260
IMCH1812ER560K	56	$\pm 10$	2.52	10	11.0	2.2	240
IMCH1812ER680K	68	$\pm 10$	2.52	10	10.0	2.6	220
IMCH1812ER820K	82	$\pm 10$	2.52	10	9.0	3.5	200
IMCH1812ER101K	100	$\pm 10$	0.796	20	8.0	4.0	180
IMCH1812ER121K	120	$\pm 10$	0.796	20	7.5	4.5	160
IMCH1812ER151K	150	$\pm 10$	0.796	20	7.0	6.5	140
IMCH1812ER181K	180	$\pm 10$	0.796	20	6.5	7.5	120
IMCH1812ER221K	220	$\pm 10$	0.796	20	5.5	9	120
IMCH1812ER271K	270	$\pm 10$	0.796	20	5.0	11	100
IMCH1812ER331K	330	$\pm 10$	0.796	20	4.0	13	90
IMCH1812ER391K	390	$\pm 10$	0.796	20	3.0	14	85
IMCH1812ER471K	470	$\pm 10$	0.796	20	3.0	16	75
IMCH1812ER561K	560	$\pm 10$	0.796	20	3.0	21	70
IMCH1812ER681K	680	$\pm 10$	0.796	20	2.5	24.2	65

## Note

<sup>(1)</sup> Rated current will cause the inductance drop within 10 %

**DIMENSIONS** in inches [millimeters]


A	B	C	D	E	F	G	H
0.177 ± 0.012 [4.5 ± 0.3]	0.126 ± 0.008 [3.2 ± 0.2]	0.126 ± 0.008 [3.2 ± 0.2]	0.047 ± 0.008 [1.2 ± 0.2]	0.039 ± 0.008 [1.0 ± 0.2]	0.205 [5.2]	0.087 [2.2]	0.063 [1.6]

**PART MARKING**

- Inductance value

**DESCRIPTION**

<b>IMCH-1812</b>	<b>22 µH</b>	<b>± 10 %</b>	<b>ER</b>	<b>e3</b>
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

**GLOBAL PART NUMBER**

<b>I M C H</b>	<b>1 8 1 2</b>	<b>E R</b>	<b>2 2 0</b>	<b>K</b>
PRODUCT FAMILY	SIZE	PACKAGE CODE	INDUCTANCE VALUE	INDUCTANCE TOLERANCE
		ER = tape and reel	220 = 22 µH	K = ± 10 %



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