IMCH1812ER1R2K Datasheet

DiGi Electronics Part Number	IMCH1812ER1R2K-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IMCH1812ER1R2K
Description	FIXED IND 1.2UH 1A 120 MOHM SMD
Detailed Description	1.2 µH Unshielded Wirewound Inductor 1 A 120mOhm Max 1812 (4532 Metric)

https://www.DiGi-Electronics.com

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
IMCH1812ER1R2K	Vishay Dale
Series:	Product Status:
IMCH-1812	Active
Type:	Material - Core:
Wirewound	-
Inductance:	Tolerance:
1.2 µH	±10%
Current Rating (Amps):	Current - Saturation (Isat):
1 A	-
Shielding:	DC Resistance (DCR):
Unshielded	120mOhm Max
Q @ Freq:	Frequency - Self Resonant:
10 @ 7.96MHz	160MHz
Ratings:	Operating Temperature:
-	-40°C ~ 85°C
Inductance Frequency - Test:	Mounting Type:
7.96 MHz	Surface Mount
Package / Case:	Supplier Device Package:
1812 (4532 Metric)	1812 (4532 Metric)
Size / Dimension:	Height - Seated (Max):
0.177" L x 0.126" W (4.50mm x 3.20mm)	0.138" (3.50mm)

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8504.50.4000	

VISHAY

www.vishay.com

IMCH-1812

Vishay Dale

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

Pb-free

RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance range: 1 µH to 680 µH

Inductance tolerance: ± 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

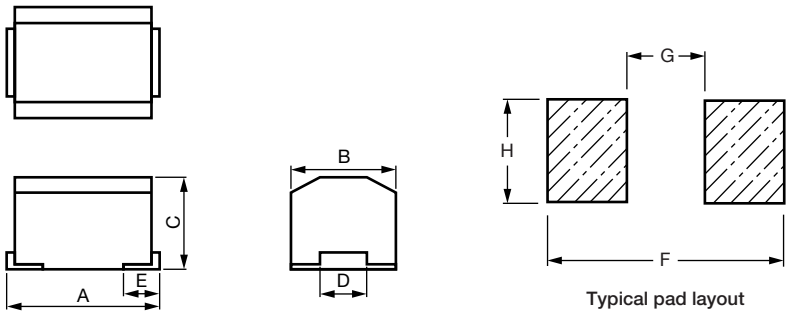
STANDARD ELECTRICAL SPECIFICATIONS

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

Note

(1) Rated current will cause the inductance drop within 10 %

DIMENSIONS in inches [millimeters]



Typical pad layout

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

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

GLOBAL PART NUMBER

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

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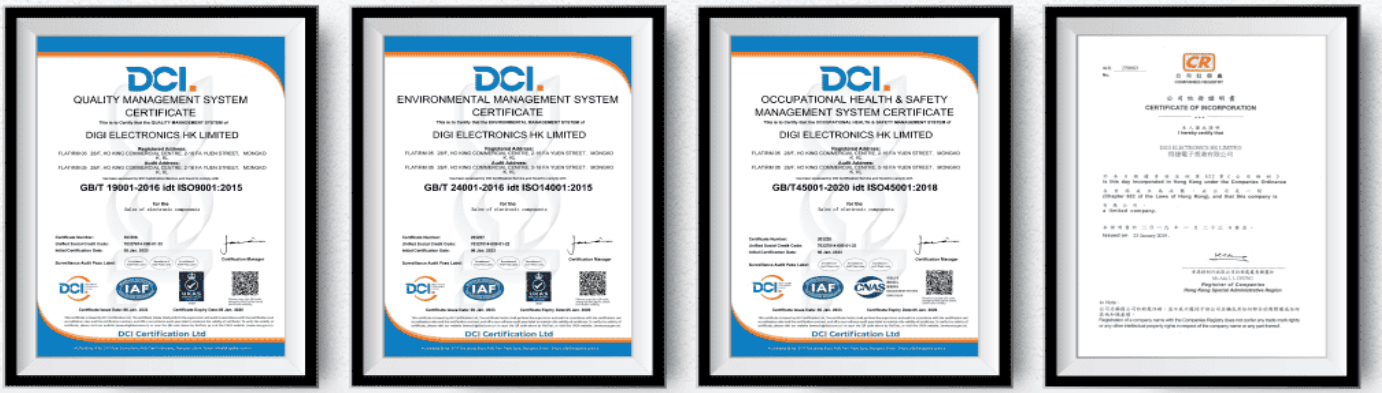

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

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