ISC1812EB680J Datasheet

DiGi Electronics Part Number	ISC1812EB680J-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	ISC1812EB680J
Description	FIXED IND 68UH 164MA 2.6 OHM SMD
Detailed Description	68 µH Shielded Drum Core, Wirewound Inductor 164 mA 2.6Ohm Max 1812 (4532 Metric)

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
ISC1812EB680J	Vishay Dale
Series:	Product Status:
ISC-1812	Active
Type:	Material - Core:
Drum Core, Wirewound	Ferrite
Inductance:	Tolerance:
68 µH	±5%
Current Rating (Amps):	Current - Saturation (Isat):
164 mA	-
Shielding:	DC Resistance (DCR):
Shielded	2.6Ohm Max
Q @ Freq:	Frequency - Self Resonant:
50 @ 2.52MHz	7.6MHz
Ratings:	Operating Temperature:
-	-55°C ~ 125°C
Inductance Frequency - Test:	Mounting Type:
2.52 MHz	Surface Mount
Package / Case:	Supplier Device Package:
1812 (4532 Metric)	1812
Size / Dimension:	Height - Seated (Max):
0.177" L x 0.126" W (4.50mm x 3.20mm)	0.134" (3.40mm)

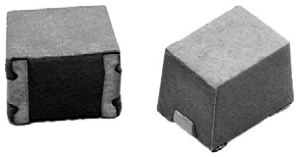
Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8504.50.8000	

VISHAY
www.vishay.com

ISC-1812
Vishay Dale

Wirewound, Surface-Mount, Molded, Shielded Inductors



STANDARD ELECTRICAL SPECIFICATIONS

IND. (µH)	TOL.	TEST FREQ. (MHz) L & Q	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) (1)
0.10	± 20 %	25.2	30	460	0.23	552
0.12	± 20 %	25.2	30	400	0.26	519
0.15	± 20 %	25.2	30	390	0.29	491
0.18	± 20 %	25.2	30	350	0.32	468
0.22	± 20 %	25.2	30	310	0.36	441
0.33	± 20 %	25.2	30	280	0.40	418
0.39	± 20 %	25.2	30	240	0.45	394
0.47	± 20 %	25.2	30	215	0.60	342
0.56	± 20 %	25.2	30	205	0.75	306
0.68	± 20 %	25.2	30	195	0.80	296
0.82	± 20 %	25.2	30	165	0.95	271
0.8	± 20 %	25.2	30	155	1.20	242
1.0	± 10 %	7.96	30	140	0.35	447
1.2	± 10 %	7.96	30	120	0.38	429
1.5	± 10 %	7.96	30	100	0.40	418
1.8	± 10 %	7.96	30	90.0	0.43	403
2.2	± 10 %	7.96	30	80.0	0.46	390
2.7	± 10 %	7.96	30	67.0	0.49	378
3.3	± 10 %	7.96	30	61.0	0.55	357
3.9	± 10 %	7.96	30	56.0	0.59	344
4.7	± 10 %	7.96	30	50.0	0.62	336
5.6	± 10 %	7.96	30	40.0	0.69	333
6.8	± 10 %	7.96	30	32.0	0.75	306
8.2	± 10 %	7.96	30	30.0	0.82	292
10.0	± 10 %	2.52	50	25.0	0.90	279
12.0	± 10 %	2.52	50	22.0	1.00	265
15.0	± 10 %	2.52	50	18.0	1.10	252
18.0	± 10 %	2.52	50	15.0	1.24	238
22.0	± 10 %	2.52	50	14.0	1.36	227
27.0	± 10 %	2.52	40	13.0	1.56	212
33.0	± 10 %	2.52	40	12.0	1.72	202
39.0	± 10 %	2.52	40	11.0	1.89	192
47.0	± 10 %	2.52	40	9.0	2.10	183
56.0	± 10 %	2.52	40	8.0	2.34	173
68.0	± 10 %	2.52	40	7.6	2.60	164
82.0	± 10 %	2.52	40	7.2	2.86	156
100.0	± 10 %	0.796	40	7.0	3.25	147
120.0	± 10 %	0.796	40	6.0	3.64	139
150.0	± 10 %	0.796	40	5.0	4.16	130
180.0	± 10 %	0.796	40	4.5	5.72	111
220.0	± 10 %	0.796	40	4.2	6.30	105
270.0	± 10 %	0.796	40	4.0	6.90	101
330.0	± 10 %	0.796	40	3.7	7.54	96
390.0	± 10 %	0.796	40	3.5	8.20	92
470.0	± 10 %	0.796	40	3.3	9.20	87
560.0	± 10 %	0.796	30	2.8	10.50	82
680.0	± 10 %	0.796	40	2.6	12.00	76
820.0	± 10 %	0.796	30	2.2	13.50	72
1000.0	± 10 %	0.252	30	2.0	16.00	66

Note

(1) Rated DC current based on the maximum temperature rise, not to exceed 40 °C at +85 °C ambient

FEATURES

- Molded construction provides superior strength and moisture resistance
- Tape and reel packaging for automatic handling, 2000/reel, EIA-481
- Compatible with vapor phase and infrared reflow soldering
- Shielded construction minimizes coupling to other components
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT
HALOGEN FREE

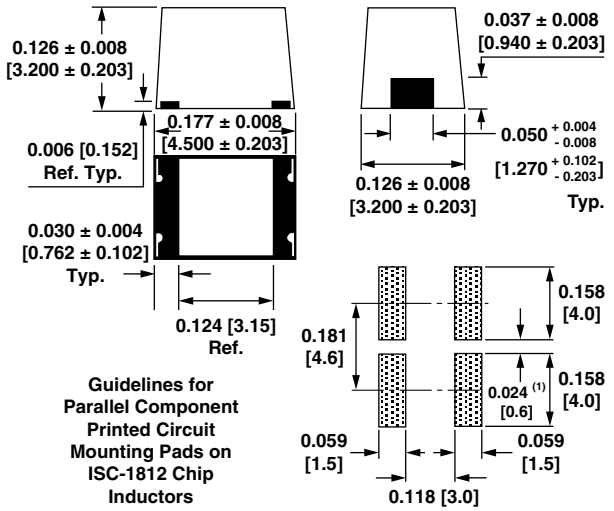
ELECTRICAL SPECIFICATIONS

Inductance range: 0.10 µH to 1000 µH
Special tolerances available upon request
Operating temperature: -55 °C to +125 °C
Coilform material: non-magnetic for 0.10 µH to 0.82 µH; powdered iron for 1.0 µH to 22 µH; ferrite for 27 µH to 1000 µH

TEST EQUIPMENT

- H/P 4342A Q meter with Vishay Dale test fixture or equivalent
- H/P 4191A RF impedance analyzer (for SRF measurements)
- Wheatstone bridge

DIMENSIONS in inches [millimeters]



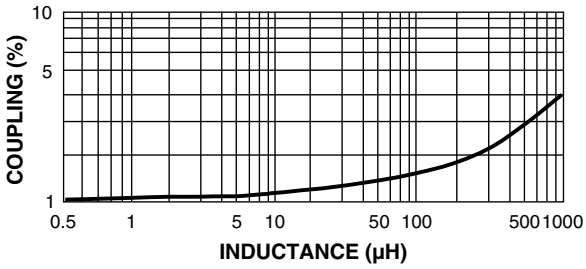
Note

(1) Recommended minimum spacing between components

PART MARKING

- Vishay Dale
- Inductance code
- Date code

COUPLING SPECIFICATIONS (maximum)



DESCRIPTION

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

GLOBAL PART NUMBER

I	S	C	1	8	1	2	E	R	1	0	0	K
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.

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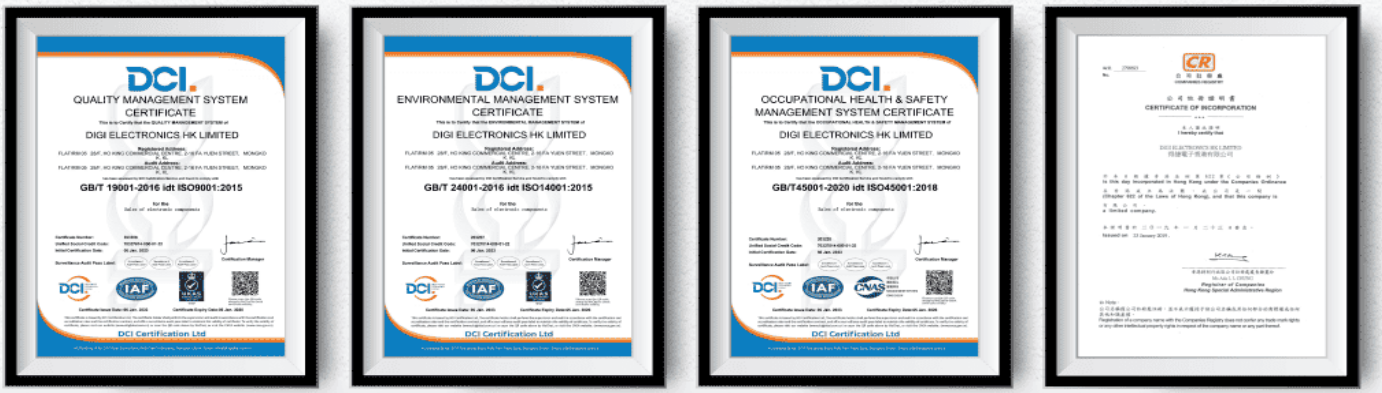

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

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