

WIRE WOUND CHIP INDUCTORS SCI SERIES

Introductions

The SCI series chip inductors are molding wire wound type used in cable modems, ADSL, notebooks, PC's, HDD, digital camera, and other electronic devices. Similar to TDK's NL series, these SCI inductors provide wide range of inductance and better Q factor. Maximum of 1.0mH is available in 1812 size.

Features

- * Operating temperature -25°C to + 85°C.
- * Excellent solderability and resistance to soldering heat .
- * Suitable for flow and reflow soldering.
- * JIS/EIA dimensions, high reliability, and easy surface mount assembly.
- * Wide range of inductance values are available for flexible needs.
- * Consisting of 1008 ~ 1812 sizes.

Part Number Code

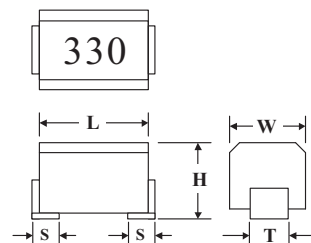
SCI 1210 F T 330 K □ □

1 **2** **3** TAPING **4** **5** Internal Code

1 Product Type

2 Chip Dimension

Size (inch) mm	Length (L) (inch) mm	Width (W) (inch) mm	Thickness (H) (inch) mm	Terminal (S) (inch) mm	Terminal (T) (inch) mm
SCI1008 252018	(0.098 ± 0.008) 2.50 ± 0.20	(0.079 ± 0.008) 2.00 ± 0.20	(0.071 ± 0.008) 1.80 ± 0.20	(0.018 ± 0.004) 0.45 ± 0.10	(0.055 ± 0.004) 1.40 ± 0.10
SCI1210 322522	(0.126 ± 0.016) 3.20 ± 0.40	(0.098 ± 0.008) 2.50 ± 0.20	(0.087 ± 0.008) 2.20 ± 0.20	(0.024 ± 0.004) 0.60 ± 0.10	(0.040 ± 0.008) 1.00 ± 0.20
SCI1812 453232	(0.178 ± 0.012) 4.50 ± 0.30	(0.126 ± 0.008) 3.20 ± 0.20	(0.126 ± 0.008) 3.20 ± 0.20	(0.040 ± 0.004) 1.00 ± 0.10	(0.048 ± 0.008) 1.20 ± 0.20



3 Material Type

F : General Usage
H : High Current

4 Inductance Value

R33 = 330 nH
331 = 330 uH

3R3 = 3.3 uH
102 = 1000 uH

330 = 33 uH

5 Tolerance

J = ± 5 %

K = ± 10 %

M = ± 20 %

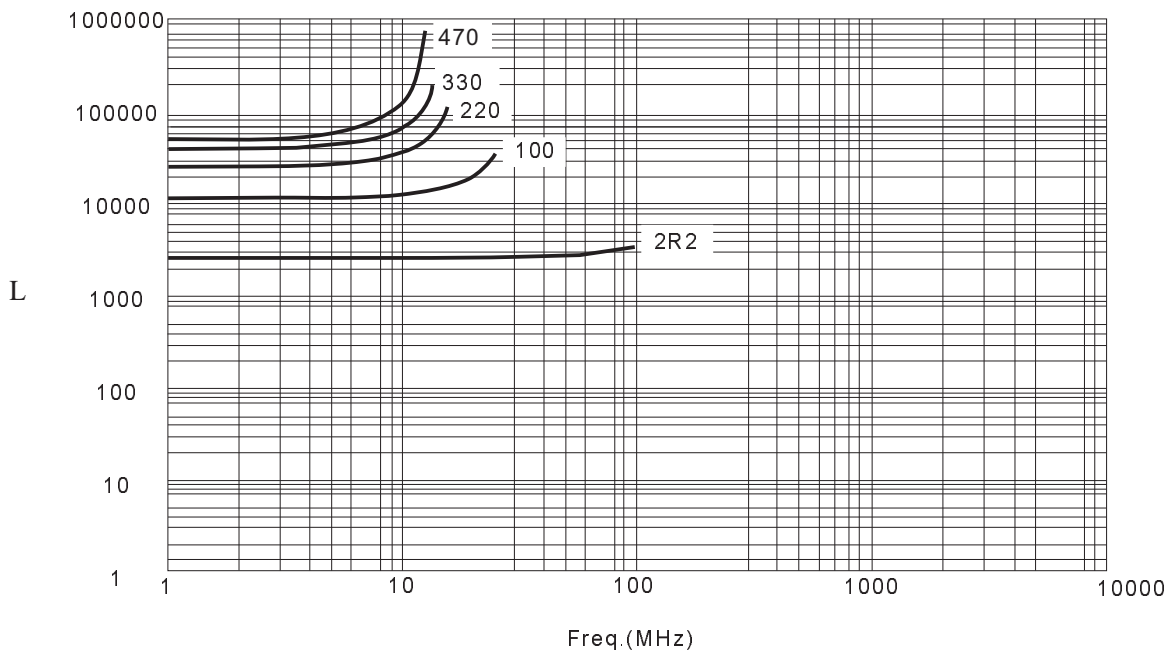
SCI 1812 (4532) FERRITE SERIES

Specification

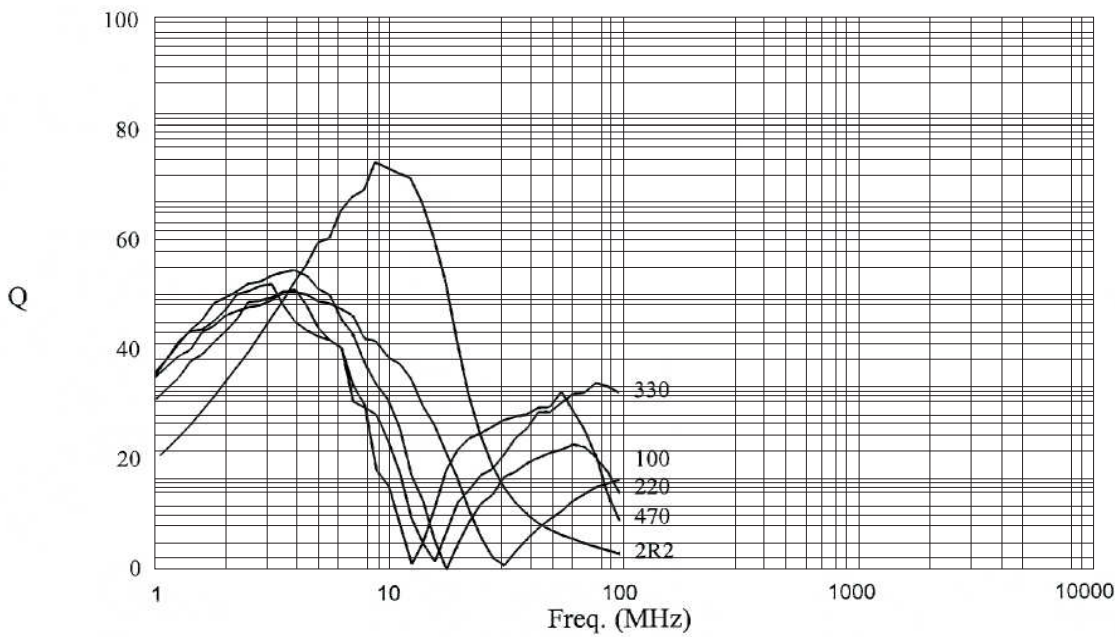
Part No.	Inductance ¹ (uH)	Percent Tolerance	Q ² Min	Test Freq. (MHZ)	S.R.F. ³ Min (MHZ)	RDC ⁴ Max (Ω)	IDC ⁵ Max (MA)
SCI 1812 FT R10 □ □ □	0.10	M	35	25.2	300	0.18	800
SCI 1812 FT R12 □ □ □	0.12	M	35	25.2	280	0.20	770
SCI 1812 FT R15 □ □ □	0.15	M	35	25.2	250	0.22	730
SCI 1812 FT R18 □ □ □	0.18	M	35	25.2	220	0.24	700
SCI 1812 FT R22 □ □ □	0.22	M	40	25.2	200	0.25	665
SCI 1812 FT R27 □ □ □	0.27	M	40	25.2	180	0.26	635
SCI 1812 FT R33 □ □ □	0.33	M	40	25.2	165	0.28	605
SCI 1812 FT R39 □ □ □	0.39	M	40	25.2	150	0.30	575
SCI 1812 FT R47 □ □ □	0.47	M	40	25.2	145	0.32	545
SCI 1812 FT R56 □ □ □	0.56	M	40	25.2	140	0.36	520
SCI 1812 FT R68 □ □ □	0.68	M	40	25.2	135	0.40	500
SCI 1812 FT R82 □ □ □	0.82	M	40	25.2	130	0.45	475
SCI 1812 FT 1R0 □ □ □	1.0	J, K	50	7.96	100	0.50	450
SCI 1812 FT 1R2 □ □ □	1.2	J, K	50	7.96	80	0.55	430
SCI 1812 FT 1R5 □ □ □	1.5	J, K	50	7.96	70	0.60	410
SCI 1812 FT 1R8 □ □ □	1.8	J, K	50	7.96	60	0.65	390
SCI 1812 FT 2R2 □ □ □	2.2	J, K	50	7.96	55	0.70	380
SCI 1812 FT 2R7 □ □ □	2.7	J, K	50	7.96	50	0.75	370
SCI 1812 FT 3R3 □ □ □	3.3	J, K	50	7.96	45	0.80	355
SCI 1812 FT 3R9 □ □ □	3.9	J, K	50	7.96	40	0.90	330
SCI 1812 FT 4R7 □ □ □	4.7	J, K	50	7.96	35	1.00	315
SCI 1812 FT 5R6 □ □ □	5.6	J, K	50	7.96	33	1.10	300
SCI 1812 FT 6R8 □ □ □	6.8	J, K	50	7.96	27	1.20	285
SCI 1812 FT 8R2 □ □ □	8.2	J, K	50	7.96	25	1.40	270
SCI 1812 FT 100 □ □ □	10	J, K	50	2.52	20	1.60	250
SCI 1812 FT 120 □ □ □	12	J, K	50	2.52	18	2.00	225
SCI 1812 FT 150 □ □ □	15	J, K	50	2.52	17	2.50	200
SCI 1812 FT 180 □ □ □	18	J, K	50	2.52	15	2.80	190
SCI 1812 FT 220 □ □ □	22	J, K	50	2.52	13	3.20	180
SCI 1812 FT 270 □ □ □	27	J, K	50	2.52	12	3.60	170
SCI 1812 FT 330 □ □ □	33	J, K	50	2.52	11	4.00	160
SCI 1812 FT 390 □ □ □	39	J, K	50	2.52	10	4.50	150
SCI 1812 FT 470 □ □ □	47	J, K	50	2.52	10	5.00	140
SCI 1812 FT 560 □ □ □	56	J, K	50	2.52	9.0	5.50	135
SCI 1812 FT 680 □ □ □	68	J, K	50	2.52	9.0	6.00	130
SCI 1812 FT 820 □ □ □	82	J, K	50	2.52	8.0	7.00	120
SCI 1812 FT 101 □ □ □	100	J, K	40	0.796	8.0	8.00	110
SCI 1812 FT 121 □ □ □	120	J, K	40	0.796	6.0	8.00	110
SCI 1812 FT 151 □ □ □	150	J, K	40	0.796	5.0	9.00	105
SCI 1812 FT 181 □ □ □	180	J, K	40	0.796	5.0	9.50	102
SCI 1812 FT 221 □ □ □	220	J, K	40	0.796	4.0	10.0	100
SCI 1812 FT 271 □ □ □	270	J, K	40	0.796	4.0	12.0	92
SCI 1812 FT 331 □ □ □	330	J, K	40	0.796	3.5	14.0	85
SCI 1812 FT 391 □ □ □	390	J, K	40	0.796	3.0	18.0	80
SCI 1812 FT 471 □ □ □	470	J, K	40	0.796	3.0	26.0	62
SCI 1812 FT 561 □ □ □	560	J, K	30	0.796	3.0	30.0	50
SCI 1812 FT 681 □ □ □	680	J, K	30	0.796	3.0	30.0	50
SCI 1812 FT 821 □ □ □	820	J, K	30	0.796	2.5	35.0	30
SCI 1812 FT 102 □ □ □	1000	J, K	20	0.252	2.5	40.0	30

SCI 1812 (4532) FERRITE SERIES

L vs Freq Plot



Q vs Freq Plot

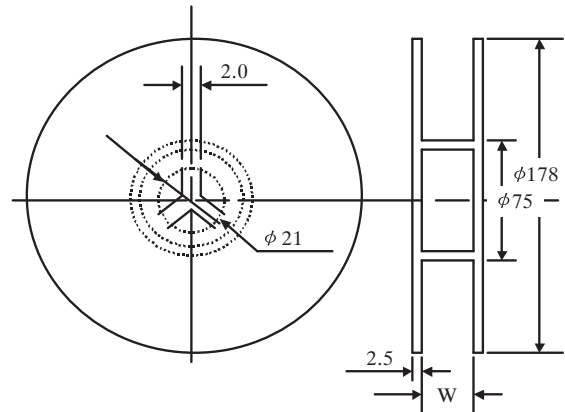


PACKAGING INFORMATION

Packing Quantity

TYPE	PCS / REEL
SCI 1008	2,000
SCI 1210	1,000
SCI 1812	500

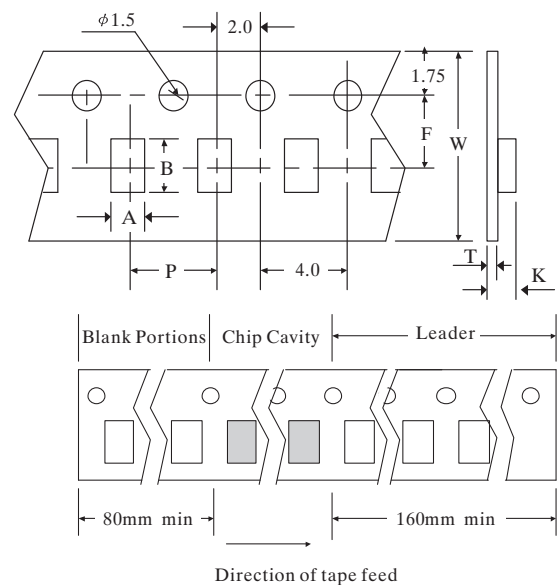
Reel Dimensions



Tape Dimensions (unit:m/m)

TYPE	Chip Cavity		Insert Pitch		Tape Thickness		Tape Width
	A	B	P	F	K	T	W
SCI 1008	2.23	2.73	4.00	3.50	1.80	0.20	8.00
SCI 1210	2.80	3.60	4.00	3.50	2.40	0.20	8.00
SCI 1812	3.60	5.00	8.00	5.50	3.60	0.30	12.00

Tape Dimensions



Pattern Dimensions (unit:m/m)

TYPE	A	B	C
SCI 1008	3.30	1.50	1.50
SCI 1210	4.00	2.00	2.00
SCI 1812	6.00	3.00	2.80

Recommended Pattern

