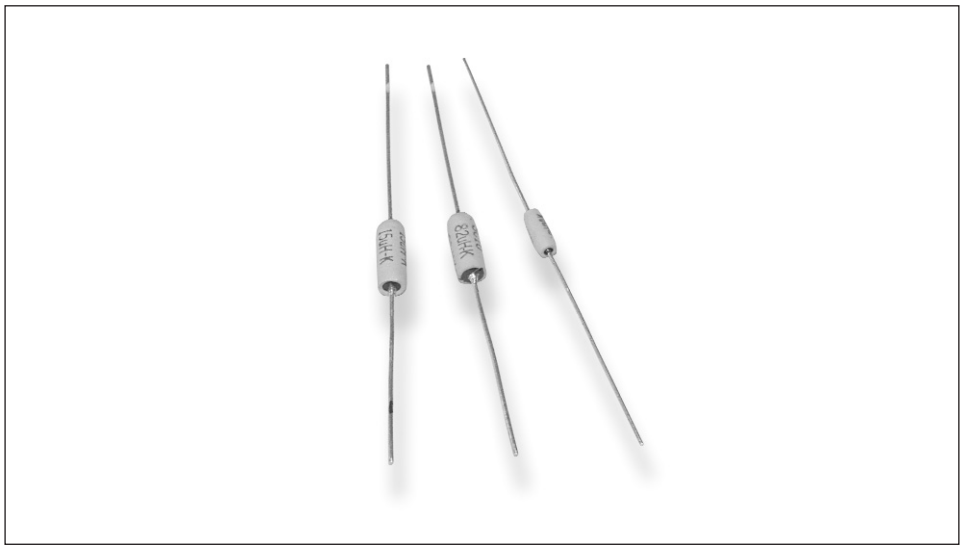
Type SC10, SC15, SC30, SC55 Series

Key Features

- Wide Inductance Range
- Insulated Packaging
- Four Sizes
- Flame Retardant
- Wide Temperature Range
- Established Reliability
- Fully Protected from the Environment
- Available from Distribution



TE Connectivity quality and reliability are guaranteed in this range of insulated and shielded RF Inductors. The insulated range has a self-extinguishing polyolefin sleeve. Their small size make them ideal for use when space is at a premium. And they are also fully protected from environmental factors. Electrostatic and electromagnetic screening is provided by the magnetic enclosure. A wide range of values are available and the self extinguishing polyolefin sleeve enhances environmental protection. The SC series was originally designed for military applications but now has widespread industrial use.

Characteristics - Electrical

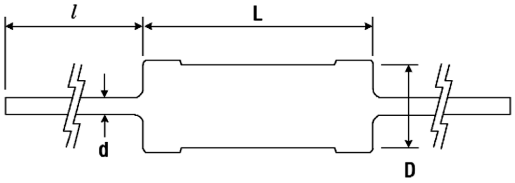
	SC10	SC15	SC30	SC55
Inductance Range:	See Table - E12 Grid (Non-standard values available to special order)			
Selection Tolerance:	±10%	±10%	±10%	±10%
Power Rating at 70°C:	0.33W	See Below	0.25W	0.30W
Isolation Voltage:	700V DC or AC peak			
Limits of Inductance Change:	5% after 1000 hours endurance			
Operating Temperature Range:	-55°C to +100°C	-55°C to +100°C	-55°C to +100°C	-55°C to +125°C
Recommended Storage Temperature:	0°C to +35°C			
Climatic Category:	55/100/21	55/100/21	55/100/21	55/125/21

SC15 Power Rating Values between 0.15uH and 4.7uH - Power Rating 0.33 Watt
Values between 5.6uH and 330uH - Power Rating 0.20 Watt

Packaging and Marking

Type	Ammo Pack	Reeled	Weight per Component	Marking
SC10	500 Pieces	1500 Pieces	–	LC10
SC15	500 Pieces	1500 Pieces	–	LC15
SC30	500 Pieces	2500 Pieces	–	LC30
SC55	500 Pieces	1500 Pieces	0.6g	LC55

Dimensions



Size	L Max.	D Max.	l Min.	d
SC10	10.0mm	4.2mm	25mm	0.6mm
SC15	10.0mm	4.5mm	30mm	0.6mm
SC30	7.0mm	2.8mm	25mm	0.5mm
SC55	11.4mm	5.2mm	30mm	0.6mm

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

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For email, phone or live chat, go to: **te.com/help**

Type SC10, SC15, SC30, SC55 Series

Characteristics - Electrical - Type SC10 - Section 1

Inductance Value - µH	Inductance Code	Test Freq. MHz	Q Factor Min.	S.R.F. MHz Min.	Max. DC Resistance Ohms at 20°C	Direct Current at 70°C Max. mA
0.10	R10	25	50	500	0.055	2060
0.12	R12	25	50	475	0.060	1970
0.15	R15	25	50	450	0.065	1900
0.18	R18	25	50	425	0.070	1830
0.22	R22	25	50	400	0.075	1770
0.27	R27	25	50	380	0.085	1660
0.33	R33	25	50	360	0.095	1570
0.39	R39	25	50	330	0.11	1460
0.47	R47	25	50	300	0.12	1390
0.56	R56	25	50	280	0.14	1290
0.68	R68	25	45	260	0.16	1210
0.82	R82	25	45	235	0.26	950
1.0	1R0	25	45	210	0.30	880
1.2	1R2	7.9	32	190	0.50	685
1.5	1R5	7.9	32	170	0.60	625
1.8	1R8	7.9	32	156	0.75	560
2.2	2R2	7.9	32	140	1.10	460
2.7	2R7	7.9	32	125	1.40	410
3.3	3R3	7.9	32	115	1.90	350

Type SC10 - Section 2

Inductance Value - µH	Inductance Code	Test Freq. MHz	Q Factor Min.	S.R.F. MHz Min.	Max. DC Resistance Ohms at 20°C	Direct Current at 70°C Max. mA
3.9	3R9	7.9	45	75	0.25	970
4.7	4R7	7.9	45	65	0.35	820
5.6	5R6	7.9	45	60	0.40	765
6.8	6R8	7.9	45	55	0.55	650
8.2	8R2	7.9	45	50	0.75	560
10	100	7.9	45	45	0.9	510
12	120	2.5	55	40	1.1	460
15	150	2.5	55	35	1.5	395
18	180	2.5	55	30	2.7	295
22	220	2.5	55	27	3.0	280
27	270	2.5	55	25	4.5	230
33	330	2.5	55	22	5.2	210
39	390	2.5	55	20	7.5	175
47	470	2.5	55	18	9.6	156

Type SC10 - Section 3

Inductance Value - µH	Inductance Code	Test Freq. MHz	Q Factor Min.	S.R.F. MHz Min.	Max. DC Resistance Ohms at 20°C	Direct Current at 70°C Max. mA
56	560	2.5	55	11	8.1	170
68	680	2.5	55	10	9.0	161
82	820	2.5	50	8.5	10.0	153
100	101	2.5	50	7.0	11.0	146
120	121	0.79	40	6.5	12.0	140
150	151	0.79	40	5.5	13.0	134
180	181	0.79	45	5.0	15.0	125
220	221	0.79	45	4.2	17.0	117
270	271	0.79	45	3.8	19.5	110
330	331	0.79	45	3.3	22.0	103
390	391	0.79	45	3.1	24.5	98
470	471	0.79	45	2.9	26.5	94
560	561	0.79	45	2.7	30.0	88
680	681	0.79	45	2.5	33.0	84
820	821	0.79	45	2.3	36.5	80
1000	102	0.79	40	2.2	40.0	76

Section 1 was formerly the TE Connectivity C10 Series, Section 2 was formerly the TE Connectivity C11 Series, Section 3 was formerly the TE Connectivity C12 Series

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Type SC10, SC15, SC30, SC55 Series

Characteristics - Electrical
Type SC15

Inductance Value - μH	Inductance Code	Test Freq. MHz	Q Factor Min.	S.R.F. MHz Min.	Max. DC Resistance Ohms at 20°C	Direct Current at 70°C Max. mA
0.15	R15	25	50	525	0.030	2790
0.18	R18	25	45	480	0.040	2420
0.22	R22	25	50	450	0.055	2060
0.27	R27	25	45	400	0.070	1830
0.33	R33	25	45	360	0.090	1610
0.39	R39	25	45	350	0.100	1530
0.47	R47	25	45	310	0.120	1400
0.56	R56	25	50	280	0.135	1320
0.68	R68	25	50	250	0.15	1250
0.82	R82	25	50	220	0.22	1030
1.0	1R0	25	50	200	0.29	900
1.2	1R2	7.9	33	180	0.42	750
1.5	1R5	7.9	33	160	0.50	685
1.8	1R8	7.9	33	150	0.65	600
2.2	2R2	7.9	33	135	0.95	495
2.7	2R7	7.9	33	120	1.20	440
3.3	3R3	7.9	33	110	2.00	340
3.9	3R9	7.9	33	100	2.30	320
4.7	4R7	7.9	33	90	2.60	300
5.6	5R6	7.9	45	60	0.32	690
6.8	6R8	7.9	50	55	0.50	550
8.2	8R2	7.9	50	50	0.60	505
10	100	7.9	55	45	0.90	415
12	120	2.5	65	42	1.10	375
15	150	2.5	65	40	1.40	330
18	180	2.5	75	34	2.25	260
22	220	2.5	75	30	2.50	250
24*	240*	2.5	60	27	2.50	250
27	270	2.5	60	25	2.60	242
30	300	2.5	65	21	2.80	230
33	330	2.5	65	19	3.00	227
36*	360*	2.5	60	15.5	2.50	250
39	390	2.5	60	14.5	2.60	244
43*	430*	2.5	60	13.7	2.70	238
47	470	2.5	55	13.0	2.75	235
51*	510*	2.5	55	12.7	2.85	231
56	560	2.5	55	12.0	3.00	225
62*	620*	2.5	55	11.5	3.15	220
68	680	2.5	55	11.0	3.30	215
75*	750*	2.5	55	10.5	3.70	203
82	820	2.5	50	10.3	3.90	200
91*	910*	2.5	50	10.0	4.30	188
100	101	2.5	50	9.5	4.50	185
110*	111*	0.79	60	8.9	4.90	176
120	121	0.79	65	8.7	5.20	170
130*	131*	0.79	65	8.5	5.45	167
150	151	0.79	65	8.0	6.05	160
160*	161*	0.79	65	7.5	6.40	154
180	181	0.79	65	7.0	6.75	150
200*	201*	0.79	65	6.5	7.10	147
220	221	0.79	65	6.2	7.45	144
240*	241*	0.79	65	5.9	7.80	140
270	271	0.79	65	5.7	9.00	131
300*	301*	0.79	65	5.4	11.50	118
330	331	0.79	65	5.1	12.50	111

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Type SC10, SC15, SC30, SC55 Series

Characteristics - Electrical
Type SC30

Inductance Value - μH	Inductance Code	Test Freq. MHz	Q Factor Min.	S.R.F. MHz Min.	Max. DC Resistance Ohms at 20°C	Direct Current at 70°C Max. mA
0.022	R022	50	33	1245	0.006	3000
0.027	R027	50	33	1200	0.010	2800
0.033	R033	50	33	1175	0.026	2620
0.039	R039	50	33	1130	0.033	2320
0.047	R047	50	33	1060	0.038	2170
0.056	R056	50	33	990	0.048	1930
0.068	R068	50	33	900	0.055	1800
0.082	R082	50	33	750	0.065	1650
0.10	R10	25	40	680	0.080	1490
0.12	R12	25	40	640	0.090	1400
0.15	R15	25	38	600	0.10	1330
0.18	R18	25	35	550	0.12	1210
0.22	R22	25	33	510	0.14	1120
0.27	R27	25	33	430	0.16	1050
0.33	R33	25	30	410	0.22	900
0.39	R39	25	30	365	0.30	770
0.47	R47	25	30	330	0.35	710
0.56	R56	25	30	300	0.50	595
0.68	R68	25	28	275	0.60	540
0.82	R82	25	28	250	0.85	455
1.0	1R0	25	25	230	1.00	420
1.2	1R2	7.9	25	150	0.18	990
1.5	1R5	7.9	28	140	0.22	895
1.8	1R8	7.9	30	125	0.30	765
2.2	2R2	7.9	30	115	0.40	665
2.7	2R7	7.9	37	100	0.55	565
3.3	3R3	7.9	45	90	0.85	455
3.9	3R9	7.9	45	80	1.0	420
4.7	4R7	7.9	45	75	1.2	384
5.6	5R6	7.9	50	65	1.8	314
6.8	6R8	7.9	50	60	2.0	298
8.2	8R2	7.9	55	55	2.7	256
10	100	7.9	55	50	3.7	219
12	120	2.5	45	40	2.7	256
15	150	2.5	45	35	2.8	251
18	180	2.5	50	30	3.1	239
22	220	2.5	50	25	3.3	232
27	270	2.5	50	20	3.5	225
33	330	2.5	45	24	3.4	228
39	390	2.5	45	22	3.6	222
47	470	2.5	45	20	4.5	198
56	560	2.5	45	18	5.7	176
68	680	2.5	50	15	6.7	162
82	820	2.5	50	14	7.3	156
100	101	2.5	50	13	8.0	149
120	121	0.79	30	12	13.0	116
150	151	0.79	30	11	15.0	108
180	181	0.79	30	10	17.0	102
220	221	0.79	30	9	21.0	92
270	271	0.79	30	8	25.0	84
330	331	0.79	30	7	28.0	79
390	391	0.79	30	6.5	35.0	71
470	471	0.79	30	6	42.0	65
560	561	0.79	30	5	46.0	62
680	681	0.79	30	4	60.0	54
820	821	0.79	30	3.8	65.0	52
1000	102	0.79	30	3.4	72.0	49

The SC30 Series was formerly the TE Connectivity C30 Series

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Type SC10, SC15, SC30, SC55 Series

Characteristics - Electrical
Type SC55

Inductance Value (μH)	Inductance Code	Q Min.	Test Freq MHz	S.R.F. MHz Min.	Max. DC Resistance Ohms	Direct Current at 85°C Max. mA	Body Marking
1.0	1R0	45	7.9	190.0	0.04	2200	1uH0-K
1.5	1R5	65	7.9	155.0	0.05	2000	1uH5-K
2.2	2R2	60	7.9	130.0	0.06	1800	2uH2-K
3.3	3R3	50	7.9	110.0	0.07	1700	3uH3-K
4.7	4R7	50	7.9	95.0	0.12	1300	4uH7-K
6.8	6R8	60	7.9	85.0	0.22	1000	6uH8-K
10	100	50	7.9	65.0	0.35	750	10uH-K
15	150	55	2.5	55.0	0.60	600	15uH-K
22	220	65	2.5	45.0	1.10	430	22uH-K
33	330	85	2.5	35.0	2.00	300	33uH-K
47	470	70	2.5	20.0	2.50	270	47uH-K
68	680	65	2.5	16.0	3.00	250	68uH-K
100	101	65	2.5	14.0	4.00	220	mH10-K
150	151	80	0.79	9.5	5.80	230	mH15-K
220	221	80	0.79	8.0	7.30	200	mH22-K
330	331	80	0.79	7.5	12.00	160	mH33-K
470	471	80	0.79	6.5	20.00	120	mH47-K
680	681	85	0.79	5.0	24.00	110	mH68-K
1000	102	85	0.79	3.0	30.00	100	1mH0-K

How to Order

SC30	104	K	T
Common Part	**Inductance Value**	**Tolerance**	**Packaging**
SC10 SC15 SC30 SC55	Please state code given in data above	K - 10%	R - Reeled T - Ammo Pack

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