

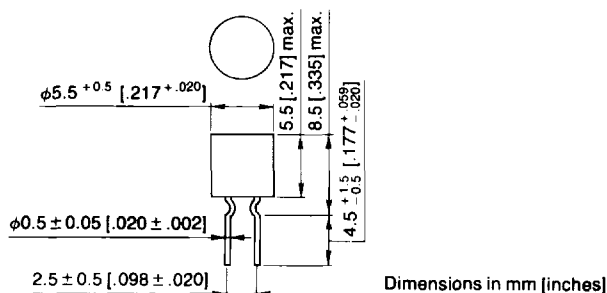
Inductors

MAGNETIC SHIELDED RADIAL LEAD TYPE, ELF SERIES

CHARACTERISTICS

Operating temperature range	- 20 to +80°C [- 4 to +176°F] (including self-temperature rise, 20°C [36°F] max.)
Storage temperature range	- 40 to +80°C [- 40 to +176°F]
Rated current	Based on temperature rise: 20°C [36°F] max. (calculated value for approximately 0.12W) Based on inductance change rate: 10% drop in initial value
Temperature characteristics	$\Delta L/L \leq \pm 10\%$ (for normal tempera- ture - 20 to +80°C [- 4 to +176°F])
Cross coupling	1% max. (MIL-C-15305D, 4.8, 8.4)

ELF0505 TYPE



ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz) ref.	DC resistance (Ω) max.	Rated current (mA) max.	
						Based on inductance change rate	Based on temperature rise
ELF0505SKI-R22M-2	0.22 \pm 20%	45	25.2	500	0.15	600	895
ELF0505SKI-R27M-2	0.27 \pm 20%	45	25.2	410	0.15	600	895
ELF0505SKI-R33M-2	0.33 \pm 20%	45	25.2	340	0.15	600	895
ELF0505SKI-R39M-2	0.39 \pm 20%	45	25.2	290	0.15	600	895
ELF0505SKI-R47M-2	0.47 \pm 20%	45	25.2	250	0.15	600	895
ELF0505SKI-R56M-2	0.56 \pm 20%	45	25.2	210	0.15	600	895
ELF0505SKI-R68M-2	0.68 \pm 20%	45	25.2	180	0.15	600	895
ELF0505SKI-R82M-2	0.82 \pm 20%	45	25.2	135	0.15	600	895
ELF0505SKI-1R0M-2	1 \pm 20%	50	7.96	125	0.15	600	895
ELF0505SKI-1R2M-2	1.2 \pm 20%	50	7.96	110	0.16	600	865
ELF0505SKI-1R5M-2	1.5 \pm 20%	50	7.96	99	0.19	600	795
ELF0505SKI-1R8M-2	1.8 \pm 20%	50	7.96	88	0.2	600	775
ELF0505SKI-2R2M-2	2.2 \pm 20%	50	7.96	79	0.23	600	720
ELF0505SKI-2R7M-2	2.7 \pm 20%	50	7.96	70	0.26	600	680
ELF0505SKI-3R3M-2	3.3 \pm 20%	50	7.96	63	0.29	600	645
ELF0505SKI-3R9M-2	3.9 \pm 20%	50	7.96	58	0.32	590	610
ELF0505SKI-4R7M-2	4.7 \pm 20%	50	7.96	53	0.36	540	575
ELF0505SKI-5R6M-2	5.6 \pm 20%	40	7.96	49	0.4	500	550
ELF0505SKI-6R8M-2	6.8 \pm 20%	40	7.96	45	0.44	455	520
ELF0505SKI-8R2M-2	8.2 \pm 20%	35	7.96	41	0.5	395	490
ELF0505SKI-100K-2	10 \pm 10%	50	2.52	37	0.8	380	385
ELF0505SKI-120K-2	12 \pm 10%	50	2.52	34	0.89	350	365
ELF0505SKI-150K-2	15 \pm 10%	50	2.52	31	1.02	320	345

* L, Q: Q meter, MODEL 4340A YHP or its equivalent Rdc: Milliohm meter, MODEL VP-2941A MATSUSHITA or its equivalent
SRF: Tracking scope, MODEL TR-4100 TAKEDA RIKEN or its equivalent

Inductors

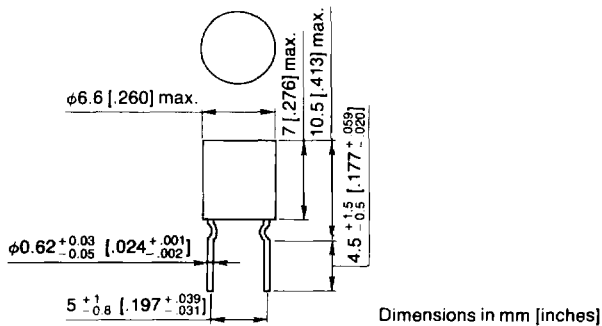
ELF0505 TYPE

ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μ H)	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz) ref.	DC resistance (Ω) max.	Rated current (mA) max.	
						Based on inductance change rate	Based on temperature rise
ELF0505SKI-180K-2	18 \pm 10%	50	2.52	28	1.14	290	325
ELF0505SKI-220K-2	22 \pm 10%	50	2.52	25	1.3	265	305
ELF0505SKI-270K-2	27 \pm 10%	50	2.52	23	1.46	240	285
ELF0505SKI-330K-2	33 \pm 10%	50	2.52	21	1.65	220	270
ELF0505SKI-390K-2	39 \pm 10%	50	2.52	19	1.83	200	255
ELF0505SKI-470K-2	47 \pm 10%	50	2.52	17.5	2.05	185	240
ELF0505SKI-560K-2	56 \pm 10%	50	2.52	16	2.3	170	230
ELF0505SKI-680K-2	68 \pm 10%	45	2.52	14.5	2.6	155	215
ELF0505SKI-820K-2	82 \pm 10%	45	2.52	13	3.1	145	195
ELF0505SKI-101K-2	100 \pm 10%	40	0.796	12	3.3	130	190
ELF0505SKI-121K-2	120 \pm 10%	40	0.796	11	4.7	120	160
ELF0505SKI-151K-2	150 \pm 10%	40	0.796	10	5.4	108	150
ELF0505SKI-181K-2	180 \pm 10%	40	0.796	9.2	5.6	99	145
ELF0505SKI-221K-2	220 \pm 10%	40	0.796	8.4	6.9	90	130
ELF0505SKI-271K-2	270 \pm 10%	40	0.796	7.6	7.8	82	125
ELF0505SKI-331K-2	330 \pm 10%	40	0.796	6.9	8.9	75	115
ELF0505SKI-391K-2	390 \pm 10%	40	0.796	6.4	13	69	96
ELF0505SKI-471K-2	470 \pm 10%	40	0.796	5.8	14.8	63	90
ELF0505SKI-561K-2	560 \pm 10%	40	0.796	5.3	16.5	58	85
ELF0505SKI-681K-2	680 \pm 10%	40	0.796	5	18.5	53	81
ELF0505SKI-821K-2	820 \pm 10%	40	0.796	4.7	26	48	68
ELF0505SKI-102K-2	1000 \pm 10%	30	0.252	4.4	31	44	62
ELF0505SKI-122K-2	1200 \pm 10%	30	0.252	4.1	37	40	57

* L, Q: Q meter, MODEL 4340A YHP or its equivalent Rdc: Milliohm meter, MODEL VP-2941A MATSUSHITA or its equivalent
SRF: Tracking scope, MODEL TR-4100 TAKEDA RIKEN or its equivalent

ELF0607 TYPE



ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μ H)	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz) ref.	DC resistance (Ω) max.	Rated current (mA) max.	
						Based on inductance change rate	Based on temperature rise
ELF0607SKI-R22M	0.22 \pm 20%	40	25.2	390	0.15	3200	895
ELF0607SKI-R27M	0.27 \pm 20%	40	25.2	330	0.15	2900	895
ELF0607SKI-R33M	0.33 \pm 20%	40	25.2	280	0.15	2600	895
ELF0607SKI-R39M	0.39 \pm 20%	40	25.2	250	0.15	2400	895
ELF0607SKI-R47M	0.47 \pm 20%	40	25.2	220	0.15	2200	895
ELF0607SKI-R56M	0.56 \pm 20%	40	25.2	190	0.15	2100	895
ELF0607SKI-R68M	0.68 \pm 20%	40	25.2	170	0.15	1900	895

* L, Q: Q meter, MODEL 4340A YHP or its equivalent Rdc: Milliohm meter, MODEL VP-2941A MATSUSHITA or its equivalent
SRF: Tracking scope, MODEL TR-4100 TAKEDA RIKEN or its equivalent

Inductors

ELF0607 TYPE

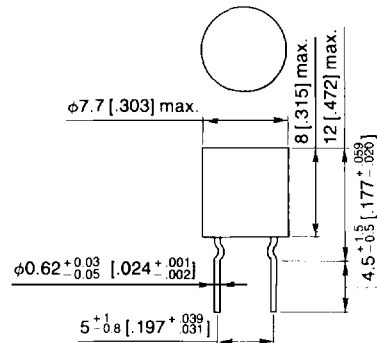
ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μH)	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz) ref.	DC resistance (Ω) max.	Rated current (mA) max.	
						Based on inductance change rate	Based on temperature rise
ELF0607SKI-R82M	0.82 \pm 20%	40	25.2	140	0.15	1700	895
ELF0607SKI-1R0M	1 \pm 20%	45	7.96	120	0.17	1600	840
ELF0607SKI-1R2M	1.2 \pm 20%	50	7.96	110	0.18	1500	815
ELF0607SKI-1R5M	1.5 \pm 20%	50	7.96	90	0.2	1300	775
ELF0607SKI-1R8M	1.8 \pm 20%	50	7.96	80	0.22	1200	740
ELF0607SKI-2R2M	2.2 \pm 20%	50	7.96	68	0.25	1100	690
ELF0607SKI-2R7M	2.7 \pm 20%	50	7.96	58	0.28	1000	655
ELF0607SKI-3R3M	3.3 \pm 20%	50	7.96	50	0.31	930	622
ELF0607SKI-3R9M	3.9 \pm 20%	50	7.96	47	0.34	860	695
ELF0607SKI-4R7M	4.7 \pm 20%	50	7.96	42	0.37	790	570
ELF0607SKI-5R6M	5.6 \pm 20%	50	7.96	39	0.4	730	545
ELF0607SKI-6R8M	6.8 \pm 20%	50	7.96	35	0.46	660	515
ELF0607SKI-8R2M	8.2 \pm 20%	50	7.96	32	0.52	580	480
ELF0607SKI-100K	10 \pm 10%	50	2.52	29	0.55	560	465
ELF0607SKI-120K	12 \pm 10%	60	2.52	26	0.97	520	350
ELF0607SKI-150K	15 \pm 10%	60	2.52	23	1.1	470	330
ELF0607SKI-180K	18 \pm 10%	60	2.52	21	1.2	430	315
ELF0607SKI-220K	22 \pm 10%	60	2.52	19	1.3	390	300
ELF0607SKI-270K	27 \pm 10%	60	2.52	17	1.5	360	285
ELF0607SKI-330K	33 \pm 10%	60	2.52	16	1.7	330	265
ELF0607SKI-390K	39 \pm 10%	60	2.52	14	1.8	300	255
ELF0607SKI-470K	47 \pm 10%	60	2.52	13	2.1	270	240
ELF0607SKI-560K	56 \pm 10%	60	2.52	12	2.3	250	230
ELF0607SKI-680K	68 \pm 10%	60	2.52	11	2.5	230	220
ELF0607SKI-820K	82 \pm 10%	60	2.52	9.8	2.8	210	205
ELF0607SKI-101K	100 \pm 10%	55	0.796	8.9	3.1	200	195
ELF0607SKI-121K	120 \pm 10%	40	0.796	8	3.4	175	185
ELF0607SKI-151K	150 \pm 10%	40	0.796	7.2	3.9	165	175
ELF0607SKI-181K	180 \pm 10%	40	0.796	6.6	4.3	150	165
ELF0607SKI-221K	220 \pm 10%	40	0.796	6	4.7	140	160
ELF0607SKI-271K	270 \pm 10%	40	0.796	5.3	5.3	125	150
ELF0607SKI-331K	330 \pm 10%	40	0.796	4.8	6	115	140
ELF0607SKI-391K	390 \pm 10%	40	0.796	4.4	6.6	105	135
ELF0607SKI-471K	470 \pm 10%	40	0.796	4	7.4	97	125
ELF0607SKI-561K	560 \pm 10%	40	0.796	3.8	8.3	90	120
ELF0607SKI-681K	680 \pm 10%	40	0.796	3.5	13.5	82	94
ELF0607SKI-821K	820 \pm 10%	40	0.796	3.2	15.5	75	88
ELF0607SKI-102K	1000 \pm 10%	30	0.252	2.9	18	68	82
ELF0607SKI-122K	1200 \pm 10%	30	0.252	2.7	21	63	76
ELF0607SKI-152K	1500 \pm 10%	30	0.252	2.4	25	57	69
ELF0607SKI-182K	1800 \pm 10%	30	0.252	2.2	29	52	64
ELF0607SKI-222K	2200 \pm 10%	30	0.252	2	34	48	59
ELF0607SKI-272K	2700 \pm 10%	30	0.252	1.8	40	43	55

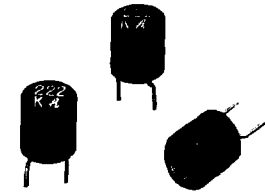
• L, Q: Q meter, MODEL 4340A YHP or its equivalent Rdc: Milliohm meter, MODEL VP-2941A MATSUSHITA or its equivalent
SRF: Tracking scope, MODEL TR-4100 TAKEDA RIKEN or its equivalent

Inductors

ELF0708 TYPE



Dimensions in mm [inches]



ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μ H)	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz) ref.	DC resistance (Ω) max.	Rated current (mA) max.	
						Based on inductance change rate	Based on temperature rise
ELF0708SKI-100K	10 \pm 10%	25 [ref.]	2.52	23	0.19	550	795
ELF0708SKI-120K	12 \pm 10%	25 [ref.]	2.52	19	0.2	500	775
ELF0708SKI-150K	15 \pm 10%	25 [ref.]	2.52	16	0.22	450	740
ELF0708SKI-180K	18 \pm 10%	25 [ref.]	2.52	14	0.24	410	705
ELF0708SKI-220K	22 \pm 10%	25 [ref.]	2.52	13	0.26	380	680
ELF0708SKI-270K	27 \pm 10%	25 [ref.]	2.52	12	0.28	340	655
ELF0708SKI-330K	33 \pm 10%	25 [ref.]	2.52	11	0.3	310	630
ELF0708SKI-390K	39 \pm 10%	25 [ref.]	2.52	10	0.33	280	605
ELF0708SKI-470K	47 \pm 10%	25 [ref.]	2.52	9.4	0.35	260	585
ELF0708SKI-560K	56 \pm 10%	25 [ref.]	2.52	8.7	0.48	240	500
ELF0708SKI-680K	68 \pm 10%	25 [ref.]	2.52	8	0.52	215	480
ELF0708SKI-820K	82 \pm 10%	25 [ref.]	2.52	7.3	0.57	200	460
ELF0708SKI-101K	100 \pm 10%	30	0.796	6.7	0.66	180	425
ELF0708SKI-121K	120 \pm 10%	30	0.796	6.2	0.75	165	400
ELF0708SKI-151K	150 \pm 10%	30	0.796	5.6	0.89	145	365
ELF0708SKI-181K	180 \pm 10%	30	0.796	5.2	1	135	345
ELF0708SKI-221K	220 \pm 10%	30	0.796	4.7	1.2	120	315
ELF0708SKI-271K	270 \pm 10%	30	0.796	4.3	1.5	110	285
ELF0708SKI-331K	330 \pm 10%	35	0.796	4	1.8	100	260
ELF0708SKI-391K	390 \pm 10%	35	0.796	3.7	2.1	92	240
ELF0708SKI-471K	470 \pm 10%	35	0.796	3.4	2.5	84	220
ELF0708SKI-561K	560 \pm 10%	35	0.796	3.1	3	76	200
ELF0708SKI-681K	680 \pm 10%	35	0.796	2.9	3.7	70	180
ELF0708SKI-821K	820 \pm 10%	35	0.796	2.7	4.4	63	165
ELF0708SKI-102K	1000 \pm 10%	40	0.252	2.4	5.6	58	145
ELF0708SKI-122K	1200 \pm 10%	40	0.252	2.2	6.8	53	135
ELF0708SKI-152K	1500 \pm 10%	40	0.252	2	9.8	47	110
ELF0708SKI-182K	1800 \pm 10%	40	0.252	1.9	11	43	105
ELF0708SKI-222K	2200 \pm 10%	40	0.252	1.7	13	40	100
ELF0708SKI-272K	2700 \pm 10%	40	0.252	1.6	17	35	85
ELF0708SKI-332K	3300 \pm 10%	30	0.252	1.4	34	33	59
ELF0708SKI-392K	3900 \pm 10%	30	0.252	1.3	38	30	56
ELF0708SKI-472K	4700 \pm 10%	30	0.252	1.2	44	28	52
ELF0708SKI-562K	5600 \pm 10%	30	0.252	1.1	51	25	49
ELF0708SKI-682K	6800 \pm 10%	30	0.252	0.97	59	23	45
ELF0708SKI-822K	8200 \pm 10%	30	0.252	0.9	68	21	42
ELF0708SKI-103K	10000 \pm 10%	25	0.001*1/0.0796*2	0.8	80	19	39
ELF0708SKI-123K	12000 \pm 10%	25	0.001/0.0796	0.75	92	17	36

*1 for L, *2 for Q

• L, Q: Q meter, MODEL 4340A YHP or its equivalent Case 1kHz L: LCR meter, MODEL 4261A YHP or its equivalent

Rdc: Milliohm meter, MODEL VP-2941A MATSUSHITA or its equivalent SRF: Tracking scope, MODEL TR-4100 TAKEDA RIKEN or its equivalent

Inductors

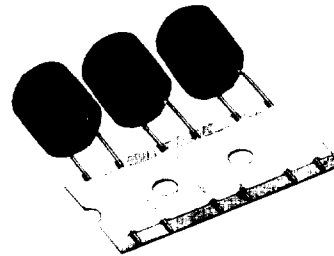
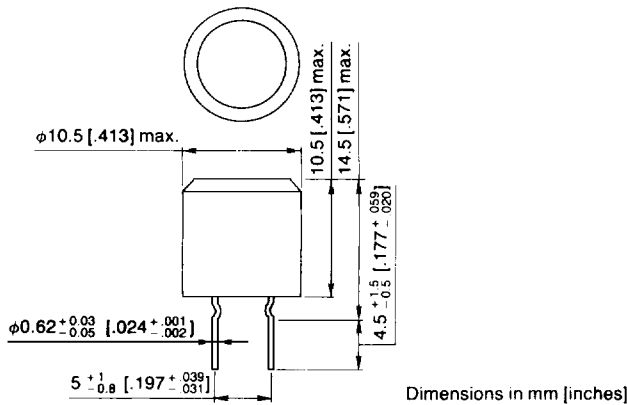
ELF0708 TYPE

ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μ H)	Q min.	Test frequency L/Q (MHz)	Self-resonant frequency (MHz) ref.	DC resistance (Ω) max.	Rated current (mA) max.	
						Based on inductance change rate	Based on temperature rise
ELF0708SKI-153K	15000 \pm 10%	25	0.001/0.0796	0.68	110	15	33
ELF0708SKI-183K	18000 \pm 10%	20	0.001/0.0796	0.6	120	14	30
ELF0708SKI-223K	22000 \pm 10%	20	0.001/0.0796	0.54	130	12	25
ELF0708SKI-273K	27000 \pm 10%	20	0.001/0.0796	0.48	160	11	20
ELF0708SKI-333K	33000 \pm 10%	20	0.001/0.0796	0.42	180	10	17

* L, Q: Q meter, MODEL 4340A YHP or its equivalent Case 1kHz L: LCR meter, MODEL 4261A YHP or its equivalent
Rdc: Milliohm meter, MODEL VP-2941A MATSUSHITA or its equivalent SRF: Tracking scope, MODEL TR-4100 TAKEDA RIKEN or its equivalent

ELF1010 TYPE



ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μ H)	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz) ref.	DC resistance (Ω) max.	Rated current (mA) max.	
						Based on inductance change rate	Based on temperature rise
ELF1010SKI-101K	100 \pm 10%	50	796	4.7	0.66	580	425
ELF1010SKI-121K	120 \pm 10%	50	796	4.2	0.73	530	405
ELF1010SKI-151K	150 \pm 10%	50	796	3.8	0.81	470	430
ELF1010SKI-181K	180 \pm 10%	50	796	3.5	0.89	430	365
ELF1010SKI-221K	220 \pm 10%	50	796	3.1	0.98	390	350
ELF1010SKI-271K	270 \pm 10%	50	796	2.8	1.05	350	340
ELF1010SKI-331K	330 \pm 10%	50	796	2.6	1.15	320	325
ELF1010SKI-391K	390 \pm 10%	50	796	2.4	1.5	290	285
ELF1010SKI-471K	470 \pm 10%	50	796	2.2	1.65	270	270
ELF1010SKI-561K	560 \pm 10%	40	796	2	1.9	245	250
ELF1010SKI-681K	680 \pm 10%	40	796	1.8	2.2	220	235
ELF1010SKI-821K	820 \pm 10%	40	796	1.6	2.6	200	215
ELF1010SKI-102K	1000 \pm 10%	60	252	1.5	3	180	200
ELF1010SKI-122K	1200 \pm 10%	60	252	1.4	3.4	170	190
ELF1010SKI-152K	1500 \pm 10%	60	252	1.2	4	150	175
ELF1010SKI-182K	1800 \pm 10%	60	252	1.1	4.6	135	160
ELF1010SKI-222K	2200 \pm 10%	60	252	1	5.4	125	150
ELF1010SKI-272K	2700 \pm 10%	60	252	0.9	6.9	110	130

* ELF1010 [100 μ H to 2.7mH] L, Q, Rdc, SRF is same as ELF0505, 0607, 0708.
* ELF1010 [3.3mH to 100mH] L: LCR meter, MODEL 4261A YHP or its equivalent Q, Rdc, SRF is same as ELF0505, 0607, 0708.
* L measuring instrument differs from others because measurement frequency is 1kHz.

Inductors

ELF1010 TYPE

ELECTRICAL CHARACTERISTICS

Part No.	Inductance (μ H)	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz) ref.	DC resistance (Ω) max.	Rated current (mA) max.	
						Based on inductance change rate	Based on temperature rise
ELF1010SKI-332K	3300 \pm 10%	60	1*1/252*2	0.81	8.2	100	120
ELF1010SKI-392K	3900 \pm 10%	60	1/252	0.75	11	92	105
ELF1010SKI-472K	4700 \pm 10%	60	1/252	0.68	14	84	93
ELF1010SKI-562K	5600 \pm 10%	60	1/252	0.63	19	77	79
ELF1010SKI-682K	6800 \pm 10%	60	1/252	0.57	22	70	74
ELF1010SKI-822K	8200 \pm 10%	60	1/252	0.52	25	63	69
ELF1010SKI-103K	10000 \pm 10%	40	1/79.6	0.47	34	57	59
ELF1010SKI-123K	12000 \pm 10%	40	1/79.6	0.43	38	53	56
ELF1010SKI-153K	15000 \pm 10%	40	1/79.6	0.38	43	47	53
ELF1010SKI-183K	18000 \pm 10%	40	1/79.6	0.34	47	43	51
ELF1010SKI-223K	22000 \pm 10%	40	1/79.6	0.31	65	39	43
ELF1010SKI-273K	27000 \pm 10%	40	1/79.6	0.28	74	35	40
ELF1010SKI-333K	33000 \pm 10%	40	1/79.6	0.25	115	32	32
ELF1010SKI-393K	39000 \pm 10%	40	1/79.6	0.23	125	29	31
ELF1010SKI-473K	47000 \pm 10%	40	1/79.6	0.22	145	26	29
ELF1010SKI-563K	56000 \pm 10%	40	1/79.6	0.2	190	24	25
ELF1010SKI-683K	68000 \pm 10%	30	1/79.6	0.18	215	22	24
ELF1010SKI-823K	82000 \pm 10%	30	1/79.6	0.17	290	20	20
ELF1010SKI-104K	100000 \pm 10%	30	1/79.6	0.15	330	18	19

*1. for L *2. for Q

• ELF1010 [100 μ H to 2.7mH] L, Q, Rdc, SRF is same as ELF0505, 0607, 0708.

• ELF1010 [3.3mH to 100mH] L: LCR meter, MODEL 4261A YHP or its equivalent Q, Rdc, SRF is same as ELF0505, 0607, 0708.

• L measuring instrument differs from others because measurement frequency is 1 kHz.