

## Multilayer Chip Ceramic Inductor –ASDCL03 Series



Operating Temp : -55°C ~+125°C

### FEATURES

- ◆ Monolithic structure for high reliability
- ◆ High self-resonant frequency
- ◆ Excellent solderability and high heat resistance
- ◆ AEC-Q200D verified

### APPLICATIONS

- ◆ Infotainment system
- ◆ Passive keyless entry
- ◆ Tire pressure monitoring system

### PRODUCT IDENTIFICATION

1	2	3	4	5	6	7
A	SDCL	03	Q	3N9	□	T

1	Feature Code
A	Automotive Electronics

2	Type
SDCL	Chip Ceramic Inductor

3	External Dimensions (L×W) (mm)
0603 [0201]	0.6×0.3

4	Characteristics Code
Q	

5	Nominal Inductance
Example	Nominal Value
3N9	3.9nH
10N	10nH
R12	120nH

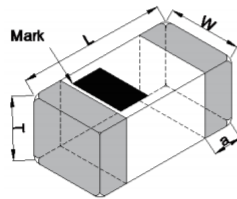
  

6	Inductance Tolerance
B	±0.1nH
C	±0.2nH
S	±0.3nH
H	±3%
J	±5%

7	Packing
T	Tape & Reel

### SHAPE AND DIMENSIONS



Unit: mm [inch]

Type	L	W	T	a
ASDCL03Q [0201]	0.6±0.03 [.024±.0012]	0.3±0.03 [.012±.0012]	0.3±0.03 [.012±.0012]	0.12±0.05 [.005±.002]

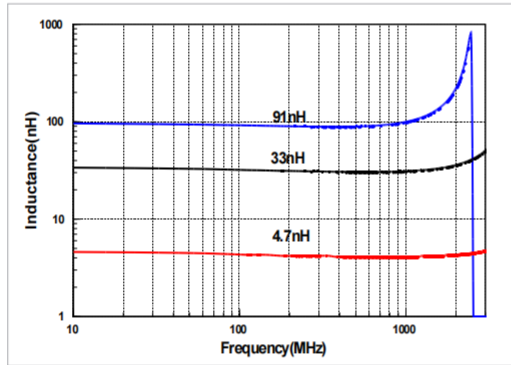
## SPECIFICATIONS ASDCL03Q TYPE

Part Number	L (nH)	Q Min.	L, Q Test. Freq(MHz)	Q (Typ.) @Freq. (GHz)					S.R.F (MHz)Min	DCR (Ω) Max.	Ir (mA) Max.	Thickness (mm)[inch]
				0.5	0.8	1.8	2	2.4				
ASDCL03Q0N6 □ T	0.6	14	500	>24	>32	>54	>57	>65	20000	0.06	850	0.3±0.03 [.012±.0012]
ASDCL03Q0N7 □ T	0.7	14	500	>24	>32	>54	>57	>65	20000	0.06	800	
ASDCL03Q0N8 □ T	0.8	14	500	>24	>32	>54	>57	>65	18000	0.07	800	
ASDCL03Q0N9 □ T	0.9	14	500	>24	>32	>54	>57	>65	18000	0.07	750	
ASDCL03Q1N0 □ T	1	14	500	24	32	54	57	65	17000	0.08	750	
ASDCL03Q1N1 □ T	1.1	14	500	19	26	45	47	55	17000	0.1	750	
ASDCL03Q1N2 □ T	1.2	14	500	19	25	43	44	52	17000	0.1	750	
ASDCL03Q1N3 □ T	1.3	14	500	19	25	40	42	47	17000	0.12	600	
ASDCL03Q1N4 □ T	1.4	14	500	19	24	39	41	47	16000	0.12	600	
ASDCL03Q1N5 □ T	1.5	14	500	19	24	39	41	46	15000	0.12	600	
ASDCL03Q1N6 □ T	1.6	14	500	19	24	39	41	46	15000	0.13	600	
ASDCL03Q1N7 □ T	1.7	14	500	19	24	39	41	46	15000	0.15	600	
ASDCL03Q1N8 □ T	1.8	14	500	19	24	39	41	46	15000	0.15	600	
ASDCL03Q1N9 □ T	1.9	14	500	18	24	38	40	45	12500	0.15	600	
ASDCL03Q2N0 □ T	2	14	500	17	24	38	39	44	12500	0.15	600	
ASDCL03Q2N1 □ T	2.1	14	500	17	24	37	39	44	11000	0.15	600	
ASDCL03Q2N2 □ T	2.2	14	500	17	24	38	40	43	11000	0.15	600	
ASDCL03Q2N3 □ T	2.3	14	500	17	24	37	39	43	10000	0.2	500	
ASDCL03Q2N4 □ T	2.4	14	500	17	23	36	38	42	10000	0.2	500	
ASDCL03Q2N5 □ T	2.5	14	500	17	23	35	36	40	10000	0.2	500	
ASDCL03Q2N6 □ T	2.6	14	500	17	22	34	35	39	10000	0.2	500	
ASDCL03Q2N7 □ T	2.7	14	500	17	22	34	35	39	10000	0.2	500	
ASDCL03Q2N8 □ T	2.8	14	500	17	22	34	35	39	9500	0.2	500	
ASDCL03Q2N9 □ T	2.9	14	500	17	22	34	35	39	9500	0.2	500	
ASDCL03Q3N0 □ T	3	14	500	17	22	34	35	39	9500	0.25	450	
ASDCL03Q3N1 □ T	3.1	14	500	17	22	34	35	39	8500	0.25	450	
ASDCL03Q3N2 □ T	3.2	14	500	17	22	33	35	39	8200	0.25	450	
ASDCL03Q3N3 □ T	3.3	14	500	18	23	34	36	40	8100	0.25	450	
ASDCL03Q3N4 □ T	3.4	14	500	17	23	33	35	39	8000	0.25	450	
ASDCL03Q3N5 □ T	3.5	14	500	17	23	33	35	39	7900	0.25	450	
ASDCL03Q3N6 □ T	3.6	14	500	16	23	33	35	39	7700	0.3	400	
ASDCL03Q3N7 □ T	3.7	14	500	16	23	33	35	38	7600	0.3	400	
ASDCL03Q3N8 □ T	3.8	14	500	16	22	33	35	38	7500	0.3	400	
ASDCL03Q3N9 □ T	3.9	14	500	16	22	33	35	38	7400	0.3	400	
ASDCL03Q4N3 □ T	4.3	14	500	16	21	32	34	37	6800	0.4	350	
ASDCL03Q4N7 □ T	4.7	14	500	16	22	33	35	38	6200	0.4	350	
ASDCL03Q5N1 □ T	5.1	14	500	17	22	34	36	38	5900	0.4	350	
ASDCL03Q5N6 □ T	5.6	14	500	16	21	33	34	37	5500	0.4	350	
ASDCL03Q6N2 □ T	6.2	14	500	18	23	34	35	37	5100	0.48	300	
ASDCL03Q6N8 □ T	6.8	14	500	17	22	32	33	35	5500	0.5	300	
ASDCL03Q7N5 □ T	7.5	14	500	16	21	31	33	34	4700	0.5	300	
ASDCL03Q8N2 □ T	8.2	14	500	16	21	31	32	34	4300	0.56	250	
ASDCL03Q9N1 □ T	9.1	14	500	16	20	30	31	32	4100	0.7	250	
ASDCL03Q10N □ T	10	14	500	16	20	28	29	31	3800	0.7	250	
ASDCL03Q11N □ T	11	14	500	16	20	27	28	28	3400	0.7	250	
ASDCL03Q12N □ T	12	14	500	16	20	27	28	28	3400	0.7	250	
ASDCL03Q13N □ T	13	14	500	15	19	24	21	15	2600	0.7	250	
ASDCL03Q15N □ T	15	13	500	15	19	23	21	14	2600	0.7	250	
ASDCL03Q16N □ T	16	13	500	15	19	23	20	12	2300	0.8	200	
ASDCL03Q18N □ T	18	13	500	15	19	23	20	12	2300	0.8	200	
ASDCL03Q20N □ T	20	13	500	15	19	22	19	10	2200	1.2	150	
ASDCL03Q22N □ T	22	13	500	15	19	22	19	10	2200	1.2	150	
ASDCL03Q24N □ T	24	13	500	15	19	15	13	8	2000	1.6	140	
ASDCL03Q27N □ T	27	13	500	15	19	15	13	8	2000	1.6	140	
ASDCL03Q30N □ T	30	11	500	14	15	8	5	-	2000	2.2	120	

## SPECIFICATIONS ASDCL03Q TYPE

Part Number	L (nH)	Q Min.	L, Q Test Freq(MHz)	Q (Typ.) @Freq. (GHz)					S.R.F (MHz)Min	DCR ( $\Omega$ ) Max.	Ir (mA) Max.	Thickness (mm)[inch]
				0.5	0.8	1.8	2	2.4				
ASDCL03Q33N □ T	33	11	300	14	15	8	5	-	2000	2.2	120	0.3±0.03 [.012±.0012]
ASDCL03Q36N □ T	36	11	300	14	15	6	-	-	1600	2.3	120	
ASDCL03Q39N □ T	39	11	300	14	15	6	-	-	1600	2.3	120	
ASDCL03Q47N □ T	47	11	300	14	15	-	-	-	1500	2.6	100	
ASDCL03Q51N □ T	51	11	300	13	13	-	-	-	1400	2.8	100	
ASDCL03Q56N □ T	56	11	300	13	13	-	-	-	1400	2.8	100	
ASDCL03Q62N □ T	62	11	300	13	11	-	-	-	1200	3.2	100	
ASDCL03Q68N □ T	68	11	300	13	11	-	-	-	1200	3.2	100	
ASDCL03Q75N □ T	75	10	300	12	10	-	-	-	1100	3.8	100	
ASDCL03Q82N □ T	82	10	300	12	10	-	-	-	1100	3.8	100	
ASDCL03Q91N □ T	91	10	300	12	10	-	-	-	1000	4	80	
ASDCL03QR10 □ T	100	10	300	12	10	-	-	-	1000	4	80	
ASDCL03QR11 □ T	110	9	300	12	8	-	-	-	1000	5	80	
ASDCL03QR12 □ T	120	9	300	12	8	-	-	-	1000	5	80	

※ □ : Please specify the inductance tolerance. For L<4.3nH, choose B=±0.1nH, C=±0.2nH or S=±0.3nH; For 4.3nHs L<5.6nH, choose H=±3%, J=±5% or S=±0.3nH; For L≥5.6nH, choose H=±3%, J=±5%

TYPICAL  
ELECTRICAL  
CHARACTERISTICSInductance vs. Frequency Characteristics  
ASDCL03Q TYPEQ vs. Frequency Characteristics  
ASDCL03Q TYPE