

Multilayer Chip Ceramic Inductor – ASDCL1608-A01 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	8	9	10
A	SDCL	1608	C	XXX	□	T	D	F	A01

1	Feature Code
A	Automotive Electronics

2	Type
SDCL	Chip Ceramic Inductor

3	External Dimensions (L×W) (mm)
1608[0603]	1.6×0.8

4	Characteristics Code
Q	Characteristics Code

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%

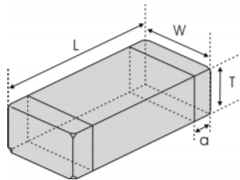
7	Packing
T	Tape Carrier Package

8	Internal Code
D	Internal Code

9	HFS Products
F	HFS Products

10	Design Code
A01	Internal Code

SHAPE AND DIMENSIONS



Unit: mm [inch]

Type	L	W	T	a
ASDCL1608 [0603]	1.6±0.15 [.063±.006]	0.8±0.15 [.031±.006]	0.8±0.15 [.031±.006]	0.3±0.2 [.012±.008]
	1.65±0.15 [.065±.006]			

SPECIFICATIONS ASDCL1608-A01 TYPE

Part Number	L	Q	L, Q Test. Freq	Q (Typ.) Freq. (MHz)			S.R.F	DC Resistance	Rated Current	Thickness
				100	800	1000				
Units	nH	(Min.)	MHz	/			MHz	Ω	mA	(mm) [inch]
Symbol	L	Q	/	/			S.R.F	DCR	Ir	T
ASDCL1608C1N0 □ TDAFA01	1.0	8	100	13	70	80	10000	0.05	500	0.8±0.15 [.03±0.006]
ASDCL1608C1N2 □ TDAFA01	1.2	8	100	13	60	70	10000	0.05	500	
ASDCL1608C1N5 □ TDAFA01	1.5	8	100	13	47	68	6000	0.10	500	
ASDCL1608C1N8 □ TDAFA01	1.8	8	100	13	45	61	6000	0.10	500	
ASDCL1608C2N2 □ TDAFA01	2.2	8	100	13	45	60	6000	0.10	500	
ASDCL1608C2N7 □ TDAFA01	2.7	10	100	13	44	55	6000	0.12	500	
ASDCL1608C3N3 □ TDAFA01	3.3	10	100	13	43	50	6000	0.15	500	
ASDCL1608C3N9 □ TDAFA01	3.9	10	100	13	43	50	6000	0.16	500	
ASDCL1608C4N7 □ TDAFA01	4.7	10	100	13	43	50	6000	0.20	500	
ASDCL1608C5N6 □ TDAFA01	5.6	10	100	14	42	48	5000	0.25	500	
ASDCL1608C6N8 □ TDAFA01	6.8	10	100	14	43	50	5000	0.30	500	
ASDCL1608C8N2 □ TDAFA01	8.2	10	100	14	43	48	4500	0.35	500	
ASDCL1608C10N □ TDAFA01	10	12	100	15	45	50	3500	0.40	300	
ASDCL1608C12N □ TDAFA01	12	12	100	18	48	50	3000	0.45	300	
ASDCL1608C15N □ TDAFA01	15	12	100	18	48	50	2300	0.50	300	
ASDCL1608C18N □ TDAFA01	18	12	100	16	48	51	2200	0.55	300	
ASDCL1608C22N □ TDAFA01	22	12	100	16	45	48	2000	0.60	300	
ASDCL1608C27N □ TDAFA01	27	12	100	16	45	45	1700	0.65	300	
ASDCL1608C33N □ TDAFA01	33	12	100	16	45	41	1500	0.70	300	
ASDCL1608C39N □ TDAFA01	39	12	100	17	40	48	1400	0.70	300	
ASDCL1608C47N □ TDAFA01	47	12	100	17	35	35	1200	0.70	300	
ASDCL1608C56N □ TDAFA01	56	12	100	17	35	30	1100	0.75	300	
ASDCL1608C68N □ TDAFA01	68	12	100	17	30	20	900	0.85	300	
ASDCL1608C82N □ TDAFA01	82	8	100	15	22	-	800	1.00	300	
ASDCL1608CR10 □ TDAFA01	100	8	100	15	16	-	700	1.20	300	
ASDCL1608CR12 □ TDAFA01*	120	8	50	15	-	-	600	1.40	200	
ASDCL1608CR15 □ TDAFA01*	150	8	50	15	-	-	500	1.60	200	
ASDCL1608CR18 □ TDAFA01*	180	8	50	15	-	-	400	1.90	200	
ASDCL1608CR22 □ TDAFA01*	220	8	50	15	-	-	350	2.40	200	
ASDCL1608CR27 □ TDAFA01*	270	8	50	16	-	-	350	2.60	150	
ASDCL1608CR33 □ TDAFA01*	330	8	50	16	-	-	350	2.80	150	
ASDCL1608CR39 □ TDAFA01*	390	8	50	16	-	-	300	3.20	150	
ASDCL1608CR43 □ TDAFA01*	430	8	50	16	-	-	280	3.40	150	
ASDCL1608CR47 □ TDAFA01*	470	8	50	15	-	-	250	3.60	150	

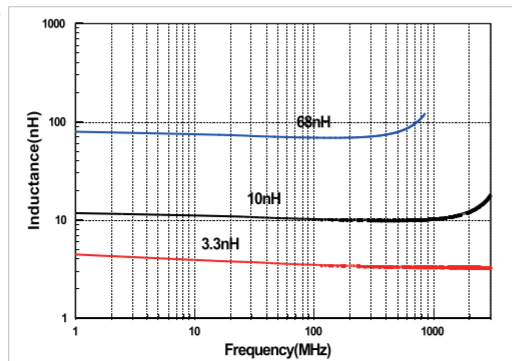
※ □ : Please specify the inductance tolerance: For L≤6.2nH, choose B=±0.1nH, C=±0.2nH or S=±0.3nH; For L>6.2nH, choose H=±3%, J=±5% or K=±10%.

※ *: The length: 1.65±0.15mm, for others: 1.60±0.15mm.

(1) Operating and storage temperature range (individual chip without packing): -55°C ~ +125°C.

(2) Storage temperature range (packaging conditions): -10°C ~ +40°C and RH 70% (Max.)

TYPICAL ELECTRICAL CHARACTERISTICS

Inductance vs. Frequency Characteristics
ASDCL1608-A01 TYPEQ vs. Frequency Characteristics
ASDCL1608-A01 TYPE