

## FEATURES

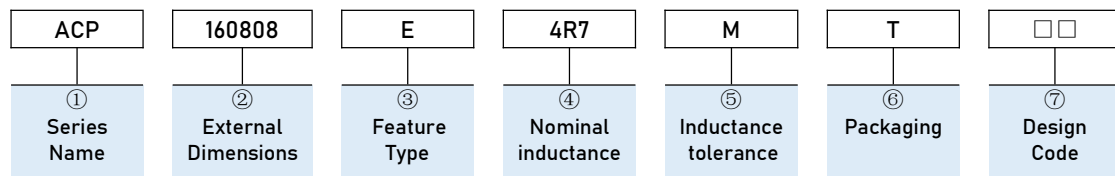
- Monolithic structure for high reliability .
- Excellent solderability and high heat resistance .
- No cross coupling due to magnetic shield .
- High DC bias current due to developed material .
- Low DC resistance.



## APPLICATIONS

- Smart phone, set top box, VR, AR,digital video cameras, and music players.
- Choke circuits in DC power line of consumer electronics such as personal computers,
- Bluetooth modules and TWS earphones .

## PART NUMBERING



① Series Name	
ACP	Chip Inductor for Choke

② External Dimensions	
160808[0603]	
201209[0805]	
252009[1008]	
321609 [1206]	

③ Feature Type	
E	Standard
D	High current

④ Nominal inductance	
Code (example)	Nominal inductance [μH]
4R7	4.7
100	10
150	15

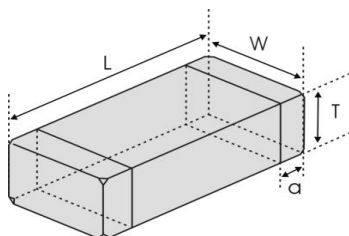
⑤ Inductance tolerance	
Code (example)	Inductance Tolerance
K	±10%
M	±20%

⑥ Packaging	
T	Tape & Reel

⑦ Design Code	
□□	Standard product is blank

## DIMENSIONS & RECOMMENDED LAND PATTERN

Unit: mm



Dimensions				
Series	L	W	T	a
ACP160808	1.6±0.20 (0.063±0.008)	0.8±0.20 (0.031±0.008)	0.8±0.20 (0.031±0.008)	0.3±0.2 (0.01±0.008)
ACP201209	2.0±0.20 (0.079±0.008)	1.2±0.20 (0.047±0.008)	0.9±0.20 (0.035±0.008)	0.5±0.3 (0.020±0.012)
ACP252009	2.5±0.20 (0.098±0.008)	2.0±0.20 (0.079±0.008)	0.9±0.20 (0.035±0.008)	0.5±0.3 (0.020±0.012)
ACP321609	3.2±0.20 (0.126±0.008)	1.6±0.20 (0.063±0.008)	0.9±0.20 (0.035±0.008)	0.5±0.3 (0.020±0.012)

## ELECTRICAL CHARACTERISTICS

## ● ACP160808E Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	Irms
ACP160808E47NMT	0.047	1/50	260	0.12	150
ACP160808E56NMT	0.056	1/50	260	0.12	150
ACP160808E68NMT	0.068	1/50	250	0.12	150
ACP160808E82NMT	0.082	1/50	245	0.12	150
ACP160808ER10MT	0.1	1/50	240	0.15	150
ACP160808ER12MT	0.12	1/50	205	0.2	150
ACP160808ER15MT	0.15	1/50	180	0.2	150
ACP160808ER18MT	0.18	1/50	165	0.2	150
ACP160808ER22MT	0.22	1/50	150	0.25	150
ACP160808ER27MT	0.27	1/50	136	0.3	100
ACP160808ER33MT	0.33	1/50	125	0.3	100
ACP160808ER39MT	0.39	1/50	110	0.35	100
ACP160808ER47MT	0.47	1/50	105	0.45	100
ACP160808ER56MT	0.56	1/50	95	0.45	100
ACP160808ER68MT	0.68	1/50	90	0.55	100
ACP160808ER82MT	0.82	1/50	85	0.6	100
ACP160808E1R0MT	1	1/50	75	0.3	150
ACP160808E1R2MT	1.2	1/50	65	0.3	150
ACP160808E1R5MT	1.5	1/50	60	0.35	120
ACP160808E1R8MT	1.8	1/50	55	0.4	120
ACP160808E2R2MT	2.2	1/50	50	0.5	120
ACP160808E2R7MT	2.7	1/50	45	0.6	100
ACP160808E3R3MT	3.3	1/50	40	0.65	100
ACP160808E3R9MT	3.9	1/50	35	0.7	80
ACP160808E4R7MT	4.7	1/50	33	0.75	80
ACP160808E5R6MT	5.6	1/50	22	0.9	60
ACP160808E6R8MT	6.8	1/50	20	0.9	60
ACP160808E8R2MT	8.2	1/50	18	1.05	60
ACP160808E100MT	10	1/50	17	1.15	60
ACP160808E120MT	12	1/50	15	1.25	60

## ● ACP201209E Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	Irms
ACP201209E47NMT	0.047	1/50	320	0.15	350
ACP201209E56NMT	0.056	1/50	320	0.15	350
ACP201209E68NMT	0.068	1/50	280	0.2	350
ACP201209E82NMT	0.082	1/50	280	0.2	350

## ELECTRICAL CHARACTERISTICS

## ● ACP201209E Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	I <sub>rms</sub>
ACP201209ER10MT	0.1	1/50	235	0.2	350
ACP201209ER12MT	0.12	1/50	220	0.2	350
ACP201209ER15MT	0.15	1/50	200	0.2	350
ACP201209ER18MT	0.18	1/50	185	0.25	300
ACP201209ER22MT	0.22	1/50	170	0.25	300
ACP201209ER27MT	0.27	1/50	150	0.25	300
ACP201209ER33MT	0.33	1/50	145	0.25	300
ACP201209ER39MT	0.39	1/50	135	0.3	250
ACP201209ER47MT	0.47	1/50	125	0.3	250
ACP201209ER56MT	0.56	1/50	115	0.36	200
ACP201209ER68MT	0.68	1/50	105	0.36	200
ACP201209ER82MT	0.82	1/50	100	0.36	200
ACP201209E1R0MT	1	1/50	75	0.26	220
ACP201209E1R2MT	1.2	1/50	65	0.26	220
ACP201209E1R5MT	1.5	1/50	60	0.3	180
ACP201209E1R8MT	1.8	1/50	55	0.3	180
ACP201209E2R2MT	2.2	1/50	50	0.36	150
ACP201209E2R7MT	2.7	1/50	45	0.36	150
ACP201209E3R3MT	3.3	1/50	41	0.4	120
ACP201209E3R9MT	3.9	1/50	38	0.4	120
ACP201209E4R7MT	4.7	1/50	35	0.4	120
ACP201209E5R6MT	5.6	1/50	32	0.6	100
ACP201209E6R8MT	6.8	1/50	29	0.6	100
ACP201209E8R2MT	8.2	1/50	26	0.65	100
ACP201209E100MT	10	1/50	24	0.65	100
ACP201209E120MT	12	1/50	22	0.65	100
ACP201209E150MT	15	1/50	19	0.75	50
ACP201209E180MT	18	1/50	18	0.75	50
ACP201209E220MT	22	1/50	16	0.75	50

## ● ACP321609E Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	I <sub>rms</sub>
ACP321609E47NMT	0.047	1/50	320	0.15	450
ACP321609E56NMT	0.056	1/50	320	0.15	450
ACP321609E68NMT	0.068	1/50	280	0.2	450
ACP321609E82NMT	0.082	1/50	280	0.2	450
ACP321609ER10MT	0.1	1/50	235	0.2	350

## ELECTRICAL CHARACTERISTICS

## ● ACP321609E Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	I <sub>rms</sub>
ACP321609ER12MT	0.12	1/50	220	0.2	350
ACP321609ER15MT	0.15	1/50	200	0.2	350
ACP321609ER18MT	0.18	1/50	185	0.2	350
ACP321609ER22MT	0.22	1/50	170	0.2	350
ACP321609ER27MT	0.27	1/50	150	0.2	350
ACP321609ER33MT	0.33	1/50	145	0.2	350
ACP321609ER39MT	0.39	1/50	135	0.3	220
ACP321609ER47MT	0.47	1/50	125	0.3	220
ACP321609ER56MT	0.56	1/50	115	0.3	220
ACP321609ER68MT	0.68	1/50	105	0.3	220
ACP321609ER82MT	0.82	1/50	100	0.3	220
ACP321609E1R0MT	1	1/50	75	0.2	250
ACP321609E1R2MT	1.2	1/50	65	0.2	250
ACP321609E1R5MT	1.5	1/50	60	0.25	250
ACP321609E1R8MT	1.8	1/50	55	0.25	250
ACP321609E2R2MT	2.2	1/50	50	0.3	200
ACP321609E2R7MT	2.7	1/50	45	0.3	200
ACP321609E3R3MT	3.3	1/50	41	0.3	200
ACP321609E3R9MT	3.9	1/50	38	0.35	150
ACP321609E4R7MT	4.7	1/50	35	0.35	150
ACP321609E5R6MT	5.6	1/50	32	0.5	100
ACP321609E6R8MT	6.8	1/50	29	0.5	100
ACP321609E8R2MT	8.2	1/50	26	0.5	100
ACP321609E100MT	10	1/50	24	0.5	100
ACP321609E120MT	12	1/50	22	0.6	100
ACP321609E150MT	15	1/50	19	0.8	50
ACP321609E180MT	18	1/50	18	0.8	50
ACP321609E220MT	22	1/50	16	1	50
ACP321609E270MT	27	1/50	14	1	50

## ● ACP201209D Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	I <sub>rms</sub>
ACP201209D47NMT	0.047	1/50	280	0.1	1,100
ACP201209D56NMT	0.056	1/50	280	0.1	1,100
ACP201209D68NMT	0.068	1/50	250	0.15	1,100

## ELECTRICAL CHARACTERISTICS

## ● ACP201209D Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	I <sub>rms</sub>
ACP201209D82NMT	0.082	1/50	250	0.15	1,100
ACP201209DR10MT	0.1	1/50	210	0.15	1,100
ACP201209DR12MT	0.12	1/50	200	0.15	1,100
ACP201209DR15MT	0.15	1/50	175	0.15	1,100
ACP201209DR18MT	0.18	1/50	160	0.15	1,100
ACP201209DR22MT	0.22	1/50	150	0.15	1,100
ACP201209DR27MT	0.27	1/50	130	0.15	1,100
ACP201209DR33MT	0.33	1/50	120	0.15	1,100
ACP201209DR39MT	0.39	1/50	110	0.15	1,100
ACP201209DR47MT	0.47	1/50	100	0.15	1,100
ACP201209DR56MT	0.56	1/50	100	0.36	800
ACP201209DR68MT	0.68	1/50	95	0.36	800
ACP201209DR82MT	0.82	1/50	90	0.36	800
ACP201209D1R0MT	1	1/50	75	0.24	800
ACP201209D1R2MT	1.2	1/50	65	0.24	800
ACP201209D1R5MT	1.5	1/50	60	0.3	700
ACP201209D1R8MT	1.8	1/50	55	0.36	600
ACP201209D2R2MT	2.2	1/50	50	0.36	600
ACP201209D2R7MT	2.7	1/50	45	0.36	600
ACP201209D3R3MT	3.3	1/50	41	0.4	350
ACP201209D3R9MT	3.9	1/50	38	0.4	350
ACP201209D4R7MT	4.7	1/50	35	0.4	350
ACP201209D5R6MT	5.6	1/50	32	0.5	250
ACP201209D6R8MT	6.8	1/50	29	0.5	250
ACP201209D8R2MT	8.2	1/50	26	0.56	250
ACP201209D100MT	10	1/50	24	0.56	250
ACP201209D120MT	12	1/50	22	0.56	250
ACP201209D150MT	15	1/50	19	0.65	100

## ● ACP252009D Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	I <sub>rms</sub>
ACP252009D1R0MT	1	1/50	70	0.12	1,500
ACP252009D1R2MT	1.2	1/50	50	0.15	1,500
ACP252009D1R5MT	1.5	1/50	50	0.15	1,500
ACP252009D1R8MT	1.8	1/50	40	0.18	1,000
ACP252009D2R2MT	2.2	1/50	40	0.18	1,000

## ELECTRICAL CHARACTERISTICS

## ● ACP252009D Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	Irms
ACP252009D2R7MT	2.7	1/50	30	0.22	1,000
ACP252009D3R3MT	3.3	1/50	30	0.22	1,000
ACP252009D3R9MT	3.9	1/50	25	0.26	1,000
ACP252009D4R7MT	4.7	1/50	25	0.26	1,000

## ● ACP321609D Series

Part Number	Inductance	L/Q Test Freq./voltage	Self-resonant Frequency	DC Resistance	Heat Rating Current
			Typ.	Max.	Max.
Units	μH	MHz/mV	MHz	Ω	mA
Symbol	L(±20%)	Freq.	S.R.F	DCR	Irms
ACP321609D1R0MT	1	1/50	60	0.15	1,200
ACP321609D1R2MT	1.2	1/50	65	0.15	1,200
ACP321609D1R5MT	1.5	1/50	60	0.17	1,000
ACP321609D1R8MT	1.8	1/50	55	0.24	900
ACP321609D2R2MT	2.2	1/50	50	0.24	900
ACP321609D2R7MT	2.7	1/50	45	0.3	800
ACP321609D3R3MT	3.3	1/50	41	0.3	800
ACP321609D3R9MT	3.9	1/50	38	0.38	700
ACP321609D4R7MT	4.7	1/50	35	0.38	700
ACP321609D5R6MT	5.6	1/50	32	0.45	500
ACP321609D6R8MT	6.8	1/50	29	0.45	500
ACP321609D8R2MT	8.2	1/50	26	0.55	300
ACP321609D100MT	10	1/50	24	0.55	300
ACP321609D120MT	12	1/50	22	0.55	300
ACP321609D150MT	15	1/50	19	0.65	100
ACP321609D180MT	18	1/50	18	0.65	100

△ All test data is referenced to 20°C ambient;

Note:

**This series product is not applies in automotive or related products. Otherwise, we will shall not bear than the resulting all the problems of quality and responsibility.**

Please be sure to request approval specifications that provide further details of the products. Kindly not that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without APV approval.

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