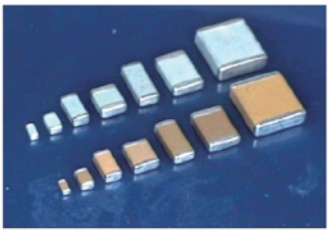
Multilayer Ceramic Chip Capacitors

[Automotive Grade]

ACC Series



◆ Features

- ❑ AEC-Q200 qualified.
- ❑ Suitable for harsh Automotive environments without additional qualification testing
- ❑ Available with Polymer Termination (Super Term) to prevent mechanical cracking
- ❑ High Reliability
- ❑ RoHS compliant
- ❑ 250Vac, X1/Y2 Safety capacitors available

◆ Applications

- ❑ Power supplies
- ❑ Lighting
- ❑ Isolation
- ❑ Powertrain
- ❑ Safety equipment
- ❑ Custom applications , BMS ,On board charger

◆ Summary of Specifications

Operating Temperature	-55 ℃ ~ +125 ℃
Rated Voltage	16Vdc ~ 1000Vdc , 250Vac X1/Y2 Safety capacitors
Temperature Coefficient	NP0 : ≤ ± 30ppm/ ℃ , -55~+125 ℃ (EIA Class Ⅰ)
	X7R : ± 15% , -55~+125 ℃ (EIA Class Ⅱ)
Capacitance Range	NP0 : 10pF ~ 47nF ; X7R : 330pF ~ 4.7uF
Dissipation Factor	NP0 : More than 30pF Q≧1000 ; 30pF & below Q≧400+20C X7R : Range 2.5% ~ 10%
Insulation Resistance	10GΩ or 500/C Ω, whichever is smaller (C in Farad)
Aging	NP0 : 0% ; X7R : 2.5% per decade of time
Dielectric Strength	V ＜100V : 250% rated voltage
	100V ≦ V ＜ 500V : 200% rated voltage
	500V ≦ V ＜ 1000V : 150% rated voltage
	1000V≦ V : 120% rated voltage

◆ How To Order

ACC	1206	X	104	K	101	T	D	X	Y

Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging	Thickness (mm) (Optional)	Special Requirement	Suffix Code
ACC : Automotive Grade Capacitors	EX : 0805 1206 1210 1812 1825	EX : N : NP0 X : X7R	EX : 100 : 10 x 10^0 221 : 22 x 10^1 332 : 33 x 10^2 473 : 47 x 10^3 684 : 68 x 10^4	Ex: J :+/- 5% K :+/-10% M:+/-20%	EX : 025 : 25Vdc 050 : 50Vdc 101 : 100Vdc 251 : 250Vdc 501 : 500Vdc	EX : T : T&R 7" R : T&R 13" B : Bulk	Ex: D: 1.25±0.20 E: 1.60±0.20	EX : X: Polymer Termination (Super Term)	Y

◆ Dimensions

Unit : mm

TYPE	L	W	T (max)	B (min)	BW (min)
0805	2.00±0.20	1.25±0.20	1.45	0.70	0.20
1206	3.20.±0.30	1.60±0.20	1.80	1.50	0.30
1210	3.20±0.30	2.50±0.20	2.60	1.60	0.30
1812	4.60±0.30	3.20±0.30	3.00	2.50	0.30
1825	4.60±0.30	6.35±0.40	3.00	2.50	0.30
2220	5.70±0.40	5.00±0.40	3.00	3.50	0.30

◆ Capacitance Range: X7R 16V~250V

Size	Voltage (V)	Capacitance Range (pF)-ACC series **X7R**																																																
		331	391	471	561	681	821	102	122	152	182	222	272	332	392	472	562	682	822	103	123	153	183	223	273	333	393	473	563	683	823	104	124	154	184	224	274	334	394	474	564	684	824	105	155	225	335	475	685	106
0805	16V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D				
	25V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D				
	50V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D						
	100V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D																									
	250V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D																									
1206	25V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	D	D	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E				
	50V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	D	D	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E				
	100V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	D	D	E	E	E	E	E	E	E	E	E	E	E	E	E						
	250V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	D	D	E																		
1210	25V																																														F	F		
	50V																																														F	F		

Note : ■ Only Polymer Termination (Super Term) Available

Symbol Code	O	A	B	C	D	E	F	G	H	I
Thickness(mm)	0.5±0.05	0.6±0.1	0.85±0.15	1.0+0.1/-0.05	1.25±0.20	1.6±0.2	2.0±0.2	2.4±0.2	2.8±0.2	3.2±0.2

◆ Capacitance Range: NPO 25V~1KV

Size	Voltage (V)	Capacitance Range (pF)-ACC Series-**NPO**																																																
		100	120	150	180	200	220	270	300	330	390	470	560	680	820	101	121	151	181	221	271	331	391	471	561	681	821	102	122	152	182	222	272	332	392	472	562	682	822	103	123	153	183	223	393	473	563	683	823	104
0805	25V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	D	D													
	50V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	D	D													
	100V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	D	D													
	250V	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D															
1206	25V				B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	D	E					
	50V				B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	D	D	D	D	E					
	100V				B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	D	D	E	E										
	250V				B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	D	D	E	E										
1210	1000V																					D	D	D																										
1812	1000V																											E	E	F	F	F	F	F	F	F	G	G												
1825	500V																																							D	E	E	E	F	F	G				

Note : □ Available with Standard or Polymer Termination (Super Term)
■ Only Polymer Termination (Super Term) Available

Symbol Code	O	A	B	C	D	E	F	G	H	I
Thickness(mm)	0.5±0.05	0.6±0.1	0.85±0.15	1.0+0.1/-0.05	1.25±0.20	1.6±0.2	2.0±0.2	2.4±0.2	2.8±0.2	3.2±0.2

■ *Other dimensions, capacitance values and voltage ratings are available on request. Please contact Holy Stone.*