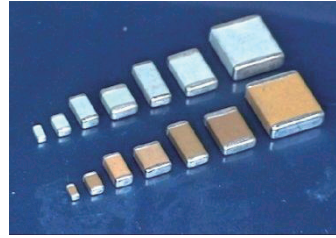


## ACC Series

Automotive Grade MLCC Capacitors.

Rated Voltage 16V – 1KVdc



### ◆ Features

- Suitable for harsh Automotive environments without additional qualification testing
- Available with Polymer Termination (Super Term) to prevent mechanical cracking
- High Reliability
- AEC-Q200 qualified
- TS16949 certified production site
- Rated voltage up to 1KVdc
- RoHS compliant
- 250Vac, X1/Y2 Safety Capacitors available

### ◆ Applications

- Power supplies
- Lighting
- Isolation
- Powertrain
- Safety equipment
- Customized application

### ◆ Summary of Specifications

Operating Temperature	-55~+125 °C
Rated Voltage	16Vdc to 1KVdc
Temperature Coefficient	NP0 : $\leq \pm 30\text{ppm}/^\circ\text{C}$ , -55~+125 °C (EIA Class I )
	X7R : $\leq \pm 15\%$ , -55~+125 °C (EIA Class II )
Capacitance Range	NP0 :10pF to 100nF ; X7R :330pF to 10uF
Dissipation Factor	NP0 : more than 30pF $Q \geq 1000$ ; 30pF & below $Q \geq 400+20C$ X7R : more than or equal to 50V: Max. 2.5% , less than 50V: Max. 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
	$100V \leq V < 500V$ : 200% rated voltage
	$500V \leq V < 1000V$ : 150% rated voltage
	$1000V \leq V$ : 120% rated voltage

### ◆ How To Order

ACC	0805	X	104	K	050	T	X	Y
Product Code	Chip Size	Dielectric	Capacitance Unit : pF	Tolerance	Rated Voltage	Packaging	Special Requirement	Suffix Code
ACC: Automotive Grade Capacitors	Ex.: 0805 1206 1210 1812 1825 2220	Ex.: N: NP0 X: X7R	Ex.: 100:10×10 <sup>0</sup> 471:47×10 <sup>1</sup> 102:10×10 <sup>2</sup> 473:47×10 <sup>3</sup> 104:10×10 <sup>4</sup>	Ex.: J :+/- 5% K :+/-10% M:+/-20%	Ex.: 025:25Vdc 050:50Vdc 101:100Vdc 251:250Vdc 501:500Vdc 102:1000Vdc	Ex.: T: T/R 7" R: T/R 13" B: Bulk	Ex.: X: Polymer Termination (Super Term)	Y

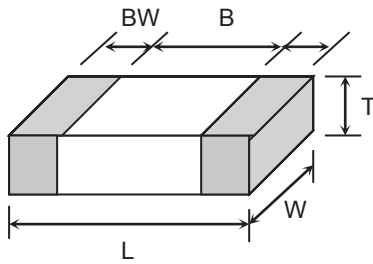
■ Regarding to the specification and How to Order of the X1/Y2 Class, please refer to SCC series or contact your local Holy Stone office.

# ACC Series – Automotive Grade Capacitors



### ◆ Dimension

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
2208 (Safety caps)	5.80±0.50	2.00±0.20	2.20	4.00	0.30
2220 (Safety caps)	5.80±0.50	5.00±0.40	3.00	4.00	0.30

### ◆ Capacitance Range

Dielectric Characteristic	Size	Rated Voltage	Capacitance Range (pF)																																													
			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
NP0	0805	25V	B/C																															B/C/D				B/C/D										
		50V																																B/C/D														
		100V																																B/C/D														
		250V																																B/C/D														
		250V																																B/C/D														
	1206	25V	B/C																					B/C/D				C/D/D																				
		50V																						B/C/D				C/D/D																				
		100V																						B/C/D				C/D/D																				
		250V																						B/C/D				C/D/D																				
	1210	50V											C/C										C/D/E																									
		100V											C/C										C/D/E																									
		1KV											D/E										C/D/E																									
	1812	50V											D/D										D/E/F																									
		100V											D/D										D/E/F																									
		1KV											E										E/F																									
1825	500V											D/E										D/E																										

Dielectric Characteristic	Size	Rated Voltage	Capacitance Range (pF)																																																																
			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	565	685	825															
X7R	0805	16V	B/C																																																					C											
		25V	B/C																																																					C											
		50V	B/C																																																					C											
		100V	B/C																																																					C											
		250V	B/C																																																					C											
	1206	25V	B/B																					C/D										D/E																																	
		50V	B/B																					C/D										D/E																																	
		100V	B/B																					C/D										D/E																																	
		250V	B/B																					C/D										D/E																																	
	1210	50V											C/D										D/E																																												
		100V											C/D										D/E																																												
	1812	50V											D/D										E																																												
		100V											D/D										E																																												
	2220	50V											D/D										D/E																																												
		100V											D/D										D/E																																												

Class	Size	Dielectric Characteristic	Rated Voltage	Certificated	Capacitance Range (pF)																													
					100	120	150	180	220	270	330	360	390	470	560	680	820	101	121	131	151	181	221	271	331	391	471	561	681	821	102	122	152	182
X1/Y2	2208	X7R	250Vrms	TUV/UL	E/F																													
X1/Y2	2220	X7R	250Vrms	TUV/UL	F																													

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

### ◆ Thickness Specification

Symbol Code	S	O	A	B	C	D	E	F	G	H
Thickness(mm)	0.3±0.03	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

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