

Multilayer Ceramic Capacitors

[Automotive Grade MLCCs]

ACC Series



◆ Features

- AEC-Q200 & IATF16949 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

Operation Temperature	-55 °C to +125 °C	
Rated Voltage	16Vdc ~ 1000Vdc , 250Vac X1/Y2 Safety capacitors	
Temperature Coefficient	NP0 : $\leq \pm 30\text{ppm}/^\circ\text{C}$	-55 °C to +125 °C (EIA Class I)
	X7R : $\pm 15\%$	-55 °C to +125 °C (EIA Class II)
Capacitance Range	NP0 : 10pF ~ 47nF ; X7R : 330pF ~ 4.7uF	
Dissipation Factor	NP0 : More than 30pF $Q \geq 1000$; 30pF & below $Q \geq 400+20C$ X7R : Range 2.5% to 10%	
Insulation Resistance	10G Ω or 500/C Ω , whichever is smaller (C in Farad)	
Aging	NP0 : 0% ; X7R : 2.5% per decade of time	
Dielectric Withstanding	$V < 100V$	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	2220	N	333	K	102	T	I	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 2222	EX : N : NP0 X : X7R	EX : 100 : 10×10^0 221 : 22×10^1 332 : 33×10^2 473 : 47×10^3 684 : 68×10^4	Ex: J: +/- 5% K: +/-10% M: +/-20%	EX : 025 : 25Vdc 050 : 50Vdc 101 : 100Vdc 251 : 250Vdc 501 : 500Vdc 102 : 1000Vdc 202 : 2000Vdc	EX : T : T&R 7" R : T&R 13" B : Bulk	Ex: D: 1.25±0.20 E: 1.60±0.20 I : 3.2±0.20	EX: X: Polymer Termination (Super Term) O: Arc Prevention Coating Z: Coating & Polymer Termination	Y

