

# Automotive MLCC

## Automotive



AVX Corporation has supported the Automotive Industry requirements for Multilayer Ceramic Capacitors consistently for more than 10 years. Products have been developed and tested specifically for automotive applications and all manufacturing facilities are QS9000 and VDA 6.4 approved.

As part of our sustained investment in capacity and state of the art technology, we are now transitioning from the established Pd/Ag electrode system to a Base Metal Electrode system (BME).

AVX is using AECQ200 as the qualification vehicle for this transition. A detailed qualification package is available on request and contains results on a range of part numbers including:

- X7R dielectric components containing BME electrode and copper terminations with a Ni/Sn plated overcoat.
- X7R dielectric components, BME electrode with epoxy finish for conductive glue mounting.
- X7R dielectric components BME electrode and soft terminations with a Ni/Sn plated overcoat.
- NPO dielectric components containing Pd/Ag electrode and silver termination with a Ni/Sn plated overcoat.



Check for up-to-date CV Tables at <http://www.avx.com/docs/catalogs/cauto.pdf>

## HOW TO ORDER

<b>0805</b>	<b>5</b>	<b>C</b>	<b>104</b>	<b>K</b>	<b>4</b>	<b>T</b>	<b>2</b>	<b>A</b>
<b>Size</b>	<b>Voltage</b>	<b>Dielectric</b>	<b>Capacitance Code (In pF)</b>	<b>Capacitance Tolerance</b>	<b>Failure Rate</b>	<b>Terminations</b>	<b>Packaging</b>	<b>Special Code</b>
0603 0805 1206 1210 1812	10V = Z 16V = Y 25V = 3 50V = 5 100V = 1 200V = 2	NPO = A X7R = C	2 Significant Digits + Number of Zeros e.g. 10µF = 106	J = ±5% K = ±10% M = ±20%	<b>4 = Automotive</b>	T = Plated Ni and Sn Z = Soft Termination U = Conductive Epoxy	2 = 7" Reel 4 = 13" Reel	A = Std. Product

## AUTOMOTIVE MLCC – NPO



	0603			0805			1206					1210				1812	
	25V	50V	100V	25V	50V	100V	25V	50V	100V	200V	500V	25V	50V	100V	200V	50V	100V
R47																	
R51																	
R56																	
R62																	
R68																	
R75																	
R82																	
R91																	
1R0																	
1R2																	
1R5																	
1R8																	
2R0																	
2R2																	
2R4																	
2R7																	
3R0																	
3R3																	
3R6																	
3R9																	
4R3																	
4R7																	
5R1																	
5R6																	
6R2																	
6R8																	
7R5																	
8R2																	
8R2																	
100																	
120																	
150																	
180																	
220																	
270																	
330																	
390																	
470																	
510																	
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																	
	25V	50V	100V	25V	50V	100V	25V	50V	100V	200V	500V	25V	50V	100V	200V	50V	100V
	0603			0805			1206					1210				1812	

= Paper Tape  
 = Plastic Tape



## AUTOMOTIVE MLCC – X7R



	0603					0805						1206					1210					1812						
	16V	25V	50V	100V	200V	10V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	500V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	
101																												
121																												
151																												
181																												
221																												
271	G	G	G	G		J	J	J	J																			
331	G	G	G	G		J	J	J	J	J	J																	
391	G	G	G	G		J	J	J	J	J	J																	
471	G	G	G	G		J	J	J	J	J	J																	
561	G	G	G	G		J	J	J	J	J	J																	
681	G	G	G	G		J	J	J	J	J	J																	
821	G	G	G	G		J	J	J	J	J	J																	
102	G	G	G	G		J	J	J	J	J	J	J	J	J	J	J												
122	G	G	G	G		J	J	J	J	J	J	J	J	J	J													
152	G	G	G	G		J	J	J	J	J	J	J	J	J	J													
182	G	G	G	G		J	J	J	J	J	J	J	J	J	J													
222	G	G	G	G		J	J	J	J	J	J	J	J	J	J													
272	G	G	G	G		J	J	J	J	J	J																	
332	G	G	G	G		J	J	J	J	J	J																	
392	G	G	G	G		J	J	J	J	J	J																	
472	G	G	G	G		J	J	J	J	J	J																	
562	G	G	G	G		J	J	J	J	J	J																	
682	G	G	G	G		J	J	J	J	J	J																	
822	G	G	G	G		J	J	J	J	J	J																	
103	G	G	G	G		J	J	J	J	J	J																	K
	16V	25V	50V	100V	200V	10V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	500V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	
	0603					0805						1206					1210					1812						

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## AUTOMOTIVE MLCC – X7R

	0603					0805						1206					1210					1812						
	16V	25V	50V	100V	200V	10V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	500V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	
123	G	G	G			J	J	J	J	M		J	J	J	J													K
153	G	G	G			J	J	J	J	M		J	J	J	J													K
183	G	G	G			J	J	J	J	M		J	J	J	J													K
223	G	G	G			J	J	J	J	M		J	J	J	J													K
273	G	G	G			J	J	J	J	M		J	J	J	J													K
333	G	G	G			J	J	J	J	M		J	J	J	J													K
393	G	G				J	J	J	J	M		J	J	J	M													K
473	G	G				J	J	J	J	M		J	J	J	M													K
563	G					J	J	J	J			J	J	J	M			K	K	K	M			K	K	K	K	K
683	G					J	J	J	J			J	J	J	M			K	K	K	M			K	K	K	K	K
823	G					J	J	J	J			J	J	J	M			K	K	K	M			K	K	K	K	K
104	G					J	J	J	J			J	J	J	M			K	K	K	M			K	K	K	K	K
124						J	J	J				J	J	M	M			K	K	K	P			K	K	K	K	K
154						M	M	N				J	J	M				K	K	K				K	K	K	M	
184						M	M	N				J	M	M				M	M	M				K	K	K	M	
224						M	M	N				J	M	M				M	M	M				M	M	M	M	
274						N	N					J	M					P	P	P				M	M	M	M	
334						N	N					J	M					P	P	P				X	X	X	X	
394						N	N					M	M					P	P	P				X	X	X	X	
474						N	N					M	M					P	P	P				X	X	X	X	
564						N						M						P						X	X	X		
684						N						M						P						X	X	X		
824						N						M						P						X	X	X		
105						N						M						P						X	X	X		
155																		P						X	X	X		
	16V	25V	50V	100V	200V	10V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	500V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	
	0603					0805						1206					1210					1812						

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