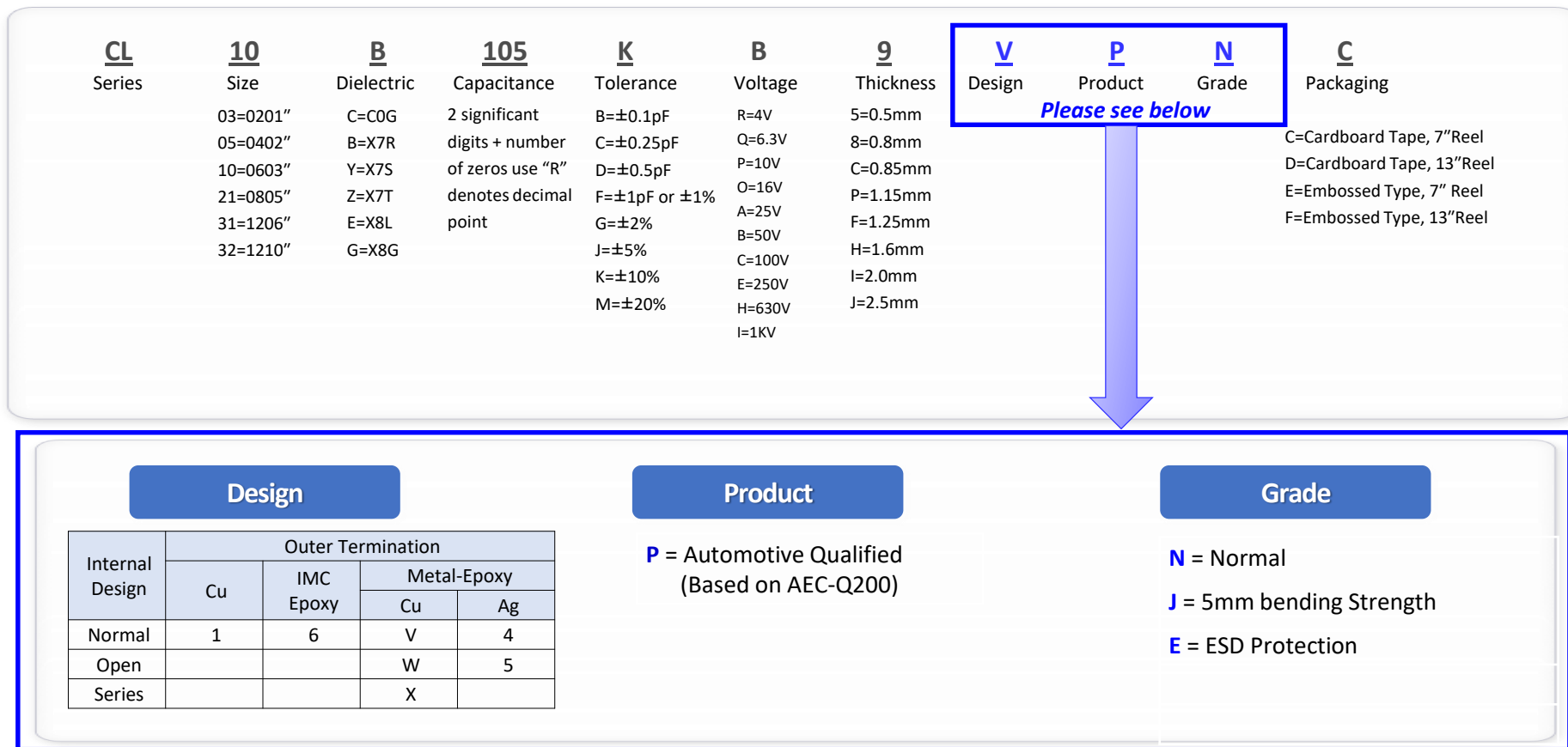


Automotive MLCC Roadmap Update



Part Numbering



Automotive MLCC Roadmap (Grade1)

X7* Series (AEC-Q200 Compliant)

-55°C~125°C
X7R : ±15% // X7S : ±15% // X7T : +22% / -33%

MP UD
Qualified

Size (Inch/mm)	Rated Voltage (V)	Capacitance (nF)									Capacitance (μF)						
		1	2.2	4.7	10	22	47	100	220	470	1	2.2	4.7	10	22	47	100
0201 /0603	25																
	16							X7S(Q3.23)									
	10							X7S(Q4.23)									
	6.3					X7S	X7S	X7S			X7T(Q2.23)						
	4.0							X7S			X7T	X7T(Q4.23)					
0402 /1005	100																
	50																
	25																
	16										X7S(Q3.23)						
	10								X7S	X7S	X7S	X7S(Q2.23)					
	6.3								X7S	X7S	X7S X7R(Q4.23)		X7T(Q2.23)				
	2.5													X7T(Q4.23)			
0603 /1608	100								X7S(Q4.23)								
	50																
	25											X7S					
	16											X7S	X7T(Q2.23)				
	10											X7S	X7T	X7T(Q3.23)			
	6.3											X7S	X7T	X7T			
	4.0													X7T	X7T(Q1.23)		
	2.5														X7T(Jan.23)		
0805 /2012	100										X7S						
	50												X7S				
	35																
	25													X7S			
	16													X7S			
	10																
	6.3														X7T		
	4.0														X7T	X7S(Q4.23)	

* Schedules can be changed according to customer request and subject to change without prior notice.

Automotive MLCC Roadmap (Grade1)

X7* Series (AEC-Q200 Compliant)

-55°C~125°C
X7R : ±15% // X7S : ±15% // X7T : +22% / -33%

MP UD
Qualified

Size (Inch/mm)	Rated Voltage (V)	Capacitance (nF)									Capacitance (μF)							
		1	2.2	4.7	10	22	47	100	220	470	1	2.2	4.7	10	22	47	100	220
1206 /3216	100											X7S	3.3uF, X7S (Q3.23)					
	50													X7S X7R(Q3.23)				
	35																	
	25																	
	16														X7S(Q1.23)			
	10																	
	6.3															X7T		
	4.0															X7T	X7T(Q2.23)	
1210 /3225	100												X7S X7R(Q1.23)	X7S(Q1.23)				
	50													X7S X7R(Q1.23)				
	35																	
	25														X7S			
	16															X7S(Q4.23)		
	10															X7S		
	6.3																X7T	
	4.0																X7T	X7T(Q2.23)
	2.5																	X7T(Feb.23)

* Schedules can be changed according to customer request and subject to change without prior notice.

Automotive MLCC Roadmap (Grade1)

X7* Series (AEC-Q200 Compliant, for High Voltage Application)

-55°C~125°C
X7R : ±15% // X7S : ±15% // X7T : +22% / -33%

MP UD
Qualified

Size (Inch/mm)	Rated Voltage (V)	Capacitance (nF)															
		1	1.5	2.2	2.7	3.3	4.7	10	15	22	33	47	100	150	220	330	470
0805/2012	250																
1206 /3216	1000																
	630											Q4.23					
	250														X7T(Q3.23)		
1210 /3225	1000																
	630												Q4.23				
	250																
1812 /4532	2000			Q4.23													
	1000												Q4.23				
	630														Q4.23		
	250																Q4.23

* Schedules can be changed according to customer request and subject to change without prior notice.

Automotive MLCC Roadmap (Grade1)

C0G Series (AEC-Q200 Compliant)

-55°C~125°C
0 ±30ppm/°C

MP UD
Qualified

Size (Inch/mm)	Rated Voltage (V)	Capacitance (pF)												Capacitance (nF)													
		10	15	22	33	47	68	100	150	220	330	470	680	1	1.5	2.2	3.3	4.7	6.8	10	15	22	33	47	56	68	100
0201/0603	50									Q4.23																	
0402/1005	100													Q4.23													
	50													Q1.23													
	25													Q1.23		Q4.23											
0603/1608	100																			Q4.23							
	50																			Q4.23							
0805/2012	100																				Q4.23						
	50																						Q4.23				
1206/3216	100																									Q4.23	
	50																									Q4.23	
1210/3225	100																										Q2.23
	50																										Q2.23

* Schedules can be changed according to customer request and subject to change without prior notice.



Automotive MLCC Roadmap (Grade1)

C0G Series (AEC-Q200 Compliant, for High Voltage Application)

-55°C~125°C
0 ±30ppm/°C

MP UD
Qualified

Size (Inch/mm)	Rated Voltage (V)	Capacitance (pF)						Capacitance (nF)													
		10	22	47	100	220	470	1	1.5	2.2	3.3	4.7	6.8	8.2	10	15	22	33	47	56	100
0603/1608	250				UD	UD	UD	Q4.23													
0805/2012	630	MP	MP	MP	MP	MP	MP	UD	UD	Q4.23											
	250							Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Q1.23						
1206/3216	1000							Q1.23													
	630																				
	250																Q1.23				
1210/3225	1000																	Q4.23			
	630														Qualified	Qualified	Qualified	May.23	Mar.23		

* Schedules can be changed according to customer request and subject to change without prior notice.



Automotive MLCC Roadmap (Grade0)

X8G Series (AEC-Q200 Compliant)

-55°C~150°C
0 ±30ppm/°C

MP UD

Size (Inch/mm)	Rated Voltage (V)	Capacitance (pF)										Capacitance (nF)							
		4.7	10	22	33	47	100	220	470	680	820	1	1.5	2.2	4.7	6.8	8.2	10	22
0402/1005	100																		
	50	MP	MP	MP		MP	MP	MP				Q4.23							
0603/1608	100		MP	MP		MP	MP	MP	MP	MP		Q4.23							
	50				MP	MP	MP	MP	MP	MP				Q4.23					
0805/2012	100												MP						
	50									MP					MP	MP		Q4.23	
1206/3216	100														Q4.23				
	50																		Q4.23

* Schedules can be changed according to customer request and subject to change without prior notice.

Automotive MLCC Roadmap (Grade0)

X8* Series (AEC-Q200 Compliant)

-55°C~150°C
X8R : ±15% // X8L : +15% / -40% // X8M : +15% / -50%

MP UD

Size (Inch/mm)	Rated Voltage (V)	Capacitance (nF)												Capacitance (μF)							
		1	2.2	4.7	10	22	33	47	68	100	220	330	470	1	2.2	4.7	10	22	47	220	
0201/0603	4																				
	2.5													X8M(Q4.23)							
0402/1005	50							X8L		X8L											
	25				X8L		X8L														
	2.5														X8M(Q4.23)						
0603/1608	100				X8R(Q3.23)					X8L											
	50							X8R(Q3.23)		X8R(Q3.23)	X8L			X8L							
	25										X8L										
	6.3															X8L					
0805/2012	100							X8R(Q3.23)													
	50									X8R(Q3.23)	X8L	X8R(Q3.23)	X8L	X8L	X8L	X8L					
	35																				
	25										X8R(Q3.23)	X8R(Q3.23)	X8L								
	16													X8L			X8M				
1206/3216	100													X8L	X8L						
	50												X8R(Q3.23)								
	35																X8M				
	25													X8R(Q3.23)			X8L				
	16																		X8L		
	10																	X8L			
	4																		X8M		
1210/3225	100														X8L	X8L					
	50																X8L(Q1.23)				
	25																	X8L			
	16																X8R(Q4.24)				
	10																	X8L(Q1.23)			
	2.5																			X8M(Q3.23)	

* Schedules can be changed according to customer request and subject to change without prior notice.