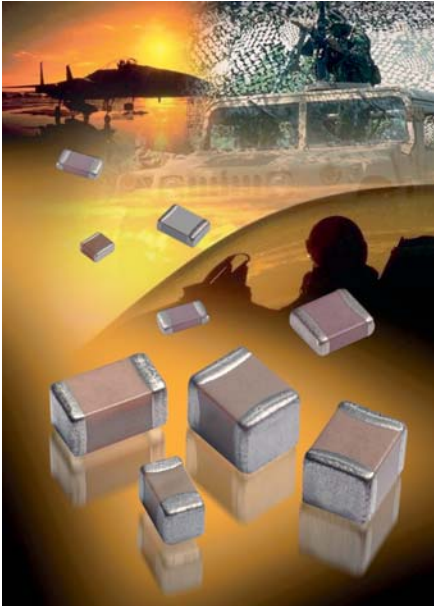


APS Series

APS for COTS+ Applications



GENERAL DESCRIPTION

As part of our continuing support to high reliability customers, AVX has launched an Automotive Plus Series of parts (APS) qualified and manufactured in accordance with automotive AEC-Q200 standard. Each production batch is quality tested to an enhanced requirement and shipped with a certificate of conformance. On a quarterly basis a reliability package is issued to all APS customers.

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 and soft terminations with a Ni/Sn plated overcoat (FLEXITERM®).
- X7R for Hybrid applications.
- NP0 dielectric components containing Pd/Ag electrode and silver termination with a Ni/Sn plated overcoat.

We are also able to support customers who require an AEC-Q200 grade component finished with Tin/Lead.

HOW TO ORDER

AP03	5	A	104	K	Q	T	2	A
Size	Voltage	Dielectric	Capacitance Code (In pF)	Capacitance Tolerance	Failure Rate	Terminations	Packaging	Special Code
AP03=0603	16V = Y	NP0 = A	2 Significant Digits +	J = ±5%	Q = APS	T = Plated Ni and Sn**	2 = 7" Reel	A = Std. Product
AP05=0805	25V = 3	X7R = C	Number of Zeros	K = ±10%		Z = FLEXITERM®**	4 = 13" Reel	
AP06=1206	50V = 5		e.g. 10µF = 106	M = ±20%		U = Conductive Epoxy**		
AP10=1210	100V = 1					B = 5% min lead		
AP12=1812	200V = 2					X = FLEXITERM® with 5% min lead		
	500V = 7							

Z, U, X for X7R only
**RoHS compliant

NOTE: Contact factory for availability of Termination and Tolerance Options for Specific Part Numbers.

NP0 Automotive Plus Series / APS



Capacitance Range

	0603			0805			1206					1210				1812	
	25V	50V	100V	25V	50V	100V	25V	50V	100V	200V	500V	25V	50V	100V	200V	50V	100V
100 10pF	G	G	G	J	J	J	J	J	J	J	J						
120 12	G	G	G	J	J	J	J	J	J	J	J						
150 15	G	G	G	J	J	J	J	J	J	J	J						
180 18	G	G	G	J	J	J	J	J	J	J	J						
220 22	G	G	G	J	J	J	J	J	J	J	J						
270 27	G	G	G	J	J	J	J	J	J	J	J						
330 33	G	G	G	J	J	J	J	J	J	J	J						
390 39	G	G	G	J	J	J	J	J	J	J	J						
470 47	G	G	G	J	J	J	J	J	J	J	J						
510 51	G	G	G	J	J	J	J	J	J	J	J						
560 56	G	G	G	J	J	J	J	J	J	J	J						
680 68	G	G	G	J	J	J	J	J	J	J	J						
820 82	G	G	G	J	J	J	J	J	J	J	J						
101 100	G	G	G	J	J	J	J	J	J	J	J						
121 120	G	G	G	J	J	J	J	J	J	J	J						
151 150	G	G	G	J	J	J	J	J	J	J	J						
181 180	G	G	G	J	J	J	J	J	J	J	J						
221 220	G	G	G	J	J	J	J	J	J	J	J						
271 270	G	G	G	J	J	J	J	J	J	J	J						
331 330	G	G	G	J	J	J	J	J	J	J	J						
391 390	G	G		J	J	J	J	J	J	J	J						
471 470	G	G		J	J	J	J	J	J	J	J						
561 560				J	J	J	J	J	J	J	J						
681 680				J	J	J	J	J	J	J	J						
821 820				J	J	J	J	J	J	J	J						
102 1000				J	J	J	J	J	J	J	J		J	J	J	J	
122 1200							J	J	J			J	J	M	M		
152 1500							J	M	M			J	J	M	M		
182 1800							J	M	M			J	J	M	M		
222 2200							J	M	M			J	J	M	M		
272 2700							J	M	Q			J	J	M			
332 3300							J	M	Q			J	J	P		K	K
392 3900												J	J	P		K	K
472 4700												J	J	P		K	K
103 10nF																	
	25V	50V	100V	25V	50V	100V	25V	50V	100V	200V	500V	25V	50V	100V	200V	50V	100V
	0603			0805			1206					1210				1812	
Letter	A	C	E	G	J		K	M	N	P	Q	X	Y	Z			
Max. Thickness	0.33 (0.013)	0.56 (0.022)	0.71 (0.028)	0.90 (0.035)	0.94 (0.037)		1.02 (0.040)	1.27 (0.050)	1.40 (0.055)	1.52 (0.060)	1.78 (0.070)	2.29 (0.090)	2.54 (0.100)	2.79 (0.110)			
	PAPER						EMBOSSED										

AEC-Q200 qualified
TS 16949, ISO 9001 certified



X7R Automotive Plus Series / APS



Capacitance Range

			0603					0805					1206					1210				1812		2220		
			16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	500V	16V	25V	50V	100V	50V	100V	25V	50V
102	Cap	1	G	G	G	G	G	J	J	J	J	J	J	J	J	J	J	J	K	K	K	K	K	K		
182	(nF)	1.8	G	G	G	G		J	J	J	J	J	J	J	J	J	J	J	K	K	K	K	K	K		
222		2.2	G	G	G	G		J	J	J	J	J	J	J	J	J	J	J	K	K	K	K	K	K		
332		3.3	G	G	G	G		J	J	J	J	J	J	J	J	J	J	J	K	K	K	K	K	K		
472		4.7	G	G	G	G		J	J	J	J	J	J	J	J	J	J	J	K	K	K	K	K	K		
103		10	G	G	G	G		J	J	J	J	J	J	J	J	J	J	J	K	K	K	K	K	K		
123		12	G	G	G			J	J	J	M		J	J	J	J	J		K	K	K	K	K	K		
153		15	G	G	G			J	J	J	M		J	J	J	J	J		K	K	K	K	K	K		
183		18	G	G	G			J	J	J	M		J	J	J	J	J		K	K	K	K	K	K		
223		22	G	G	G			J	J	J	M		J	J	J	J	J		K	K	K	K	K	K		
273		27	G	G	G			J	J	J	M		J	J	J	J	J		K	K	K	K	K	K		
333		33	G	G	G			J	J	J	M		J	J	J	J	J		K	K	K	K	K	K		
473		47	G	G	G			J	J	J	M		J	J	J	M	J		K	K	K	K	K	K		
563		56	G	G	G			J	J	J	M		J	J	J	M	J		K	K	K	M	K	K		
683		68	G	G	G			J	J	J	M		J	J	J	M	J		K	K	K	M	K	K		
823		82	G	G	G			J	J	J	M		J	J	J	M	J		K	K	K	M	K	K		
104		100	G	G	G			J	J	M	M		J	J	J	M	J		K	K	K	M	K	K		
124		120						J	J	M			J	J	M	M			K	K	K	P	K	K		
154		150						M	N	M			J	J	M	M			K	K	K	P	K	K		
224		220						M	N	M			J	M	M	Q			M	M	M	P	M	M		
334		330						N	N	M			J	M	P	Q			P	P	P	Q	X	X		
474		470						N	N	M			M	M	P	Q			P	P	P	Q	X	X		
684		680						N	N				M	Q	Q	Q			P	P	Q	X	X	X		
105	Cap	1						N	N				M	Q	Q	Q			P	Q	Q	X	X	X		
155	(µF)	1.5											Q	Q					P	Q	Z	Z	X	X		
225		2.2											Q	Q					X	Z	Z	Z	Z	Z		
335		3.3																	X	Z	Z		Z			
475		4.7																	X	Z	Z		Z			
106		10																							Z	
226		22																							Z	
			16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	16V	25V	50V	100V	200V	500V	16V	25V	50V	100V	50V	100V	25V	50V
			0603					0805					1206					1210				1812		2220		

 = Under Development

Letter	A	C	E	G	J	K	M	N	P	Q	X	Y	Z
Max. Thickness	0.33 (0.013)	0.56 (0.022)	0.71 (0.028)	0.90 (0.035)	0.94 (0.037)	1.02 (0.040)	1.27 (0.050)	1.40 (0.055)	1.52 (0.060)	1.78 (0.070)	2.29 (0.090)	2.54 (0.100)	2.79 (0.110)
	PAPER					EMBOSSED							

AEC-Q200 qualified
TS 16949, ISO 9001 certified

