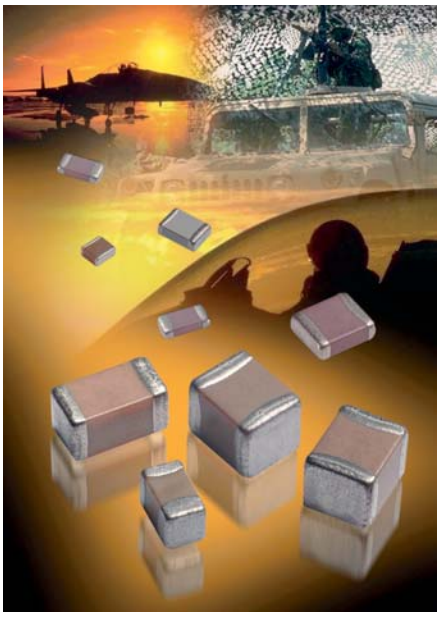
APS Series

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 AP05=0805 AP06=1206 AP10=1210 AP12=1812	16V = Y 25V = 3 50V = 5 100V = 1 200V = 2 500V = 7	NP0 = A X7R = C	2 Significant Digits + Number of Zeros e.g. 10µF = 106	J = ±5% K = ±10% M = ±20%	**Q = APS**	T = Plated Ni and Sn** Z = FLEXITERM®** U = Conductive Epoxy** B = 5% min lead X = FLEXITERM® with 5% min lead Z, U, X for X7R only **RoHS compliant	2 = 7" Reel 4 = 13" Reel	A = Std. Product

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							
220	22	G	G	G	J	J	J	J	J	J	J							
270	27	G	G	G	J	J	J	J	J	J	J							
330	33	G	G	G	J	J	J	J	J	J	J							
390	39	G	G	G	J	J	J	J	J	J	J							
470	47	G	G	G	J	J	J	J	J	J	J							
510	51	G	G	G	J	J	J	J	J	J	J							
560	56	G	G	G	J	J	J	J	J	J	J							
680	68	G	G	G	J	J	J	J	J	J	J							
820	82	G	G	G	J	J	J	J	J	J	J							
101	100	G	G	G	J	J	J	J	J	J	J							
121	120	G	G	G	J	J	J	J	J	J	J							
151	150	G	G	G	J	J	J	J	J	J	J							
181	180	G	G	G	J	J	J	J	J	J	J							
221	220	G	G	G	J	J	J	J	J	J	J							
271	270	G	G	G	J	J	J	J	J	J	J							
331	330	G	G	G	J	J	J	J	J	J	J							
391	390	G	G		J	J	J	J	J	J	J							
471	470	G	G		J	J	J	J	J	J	J							
561	560				J	J	J	J	J	J	J							
681	680				J	J	J	J	J	J	J							
821	820				J	J	J	J	J	J	J							
102	1000				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

RoHS COMPLIANT

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
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RoHS COMPLIANT