



MULTILAYER CERAMIC CHIP CAPACITORS

HVArc Guard[®] X7R



HVArc Guard[®] X7R Capacitors With Optional Polymer Terminations

Optional Polymer Terminations decrease capacitor failures due to mechanical cracking

FEATURES

- Available with optional polymer terminations to decrease capacitor failures created from mechanical stress
- Capacitance ranges of 100 pF to 0.27 μ F
- Offered in, 0805, 1206, 1210, 1808, and 1812 case sizes
- High capacitances and small case sizes save board space (compared to high-voltage MLCCs)
- Excellent reliability and high-voltage performance: rated for 250 VDC to 1000 VDC
- Eliminate the need to encapsulate capacitors with a conformal coating
- Average voltage breakdown (VBD) is typically twice that of standard commercial-grade products
- Replace wire-leaded, through-hole capacitors

APPLICATIONS

- High-voltage applications
- Medical equipment and instrumentation
- Electronic transmissions

Surface Mount Multilayer Ceramic Chip Capacitors Prohibit Surface Arc-over in High Voltage Applications

TYPICAL TERMINATION TO TERMINATION SURFACE ARCING ON MLCCS (shown in polarized light)



HVARC GUARD® X7R CAPACITANCE RANGE		0805			1206			1210			1808			1812		
VOLTAGE (Vdc)	VOLTAGE CODE	630	1000	250	500	630	1000	250	500	630	1000	250	500	630	1000	
CAP. CODE	CAP.	L	G	P	E	L	G	P	E	L	G	P	E	L	G	
101	100 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
121	120 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
151	150 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
181	180 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
221	220 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
271	270 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
331	330 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
391	390 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
471	470 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
561	560 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
681	680 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
821	820 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
102	1000 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
122	1200 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
152	1500 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
182	1800 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
222	2200 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
272	2700 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
332	3300 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
392	3900 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
472	4700 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
562	5600 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
682	6800 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
822	8200 pF	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
105	0.01 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
123	0.012 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
153	0.015 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
183	0.018 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
223	0.022 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
273	0.027 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
333	0.033 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
393	0.039 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
473	0.047 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
563	0.056 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
683	0.068 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
823	0.082 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
104	0.10 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
124	0.12 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
154	0.15 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
184	0.18 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
224	0.22 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
274	0.27 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	
334	0.33 μ F	**	**	**	**	**	**	**	**	**	**	**	**	**	**	

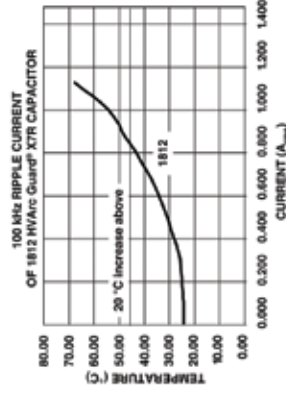
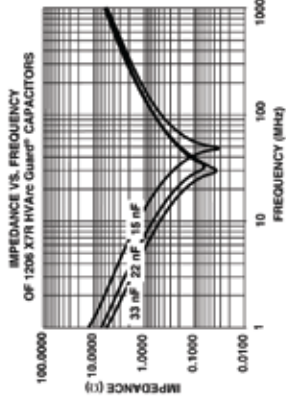
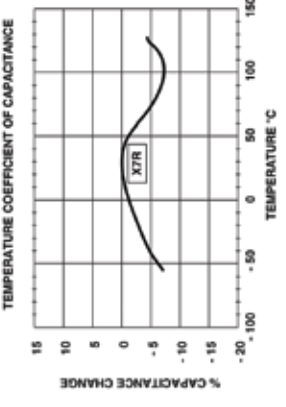
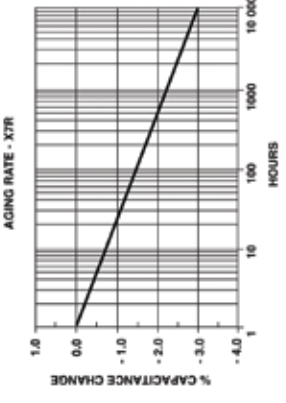
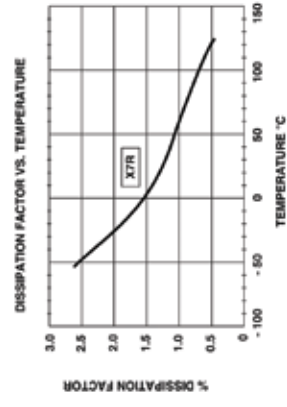
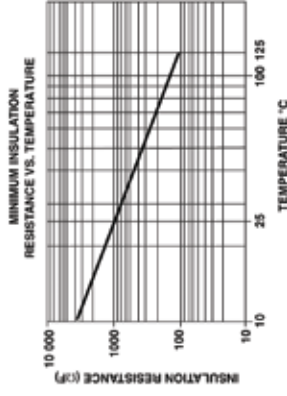
Notes: See soldering recommendations within this data book, or visit www.vishay.com/doc?45034

- Available in plastic carrier tape only
- Only available in paper carrier tape

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TYPICAL PARAMETERS



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