

Type FCP Surface Mount Film Capacitors

Stable Stacked Metallized Film (PPS) Chips for Reflow Soldering

Ratings

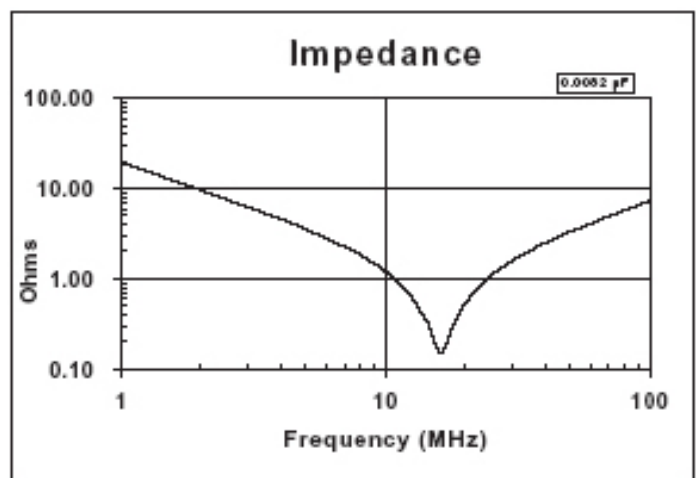
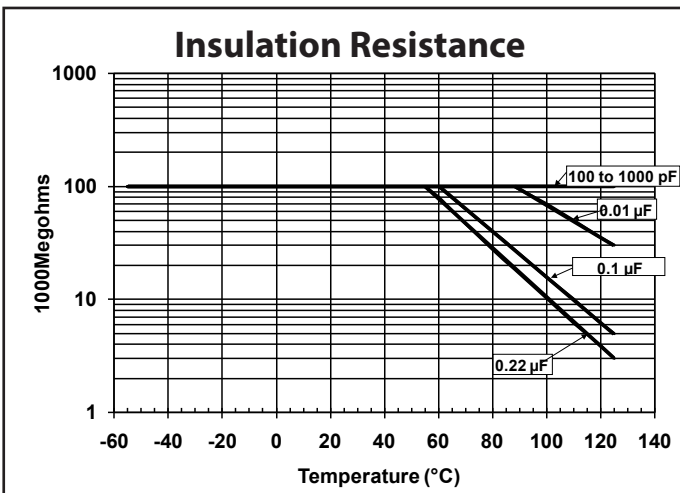
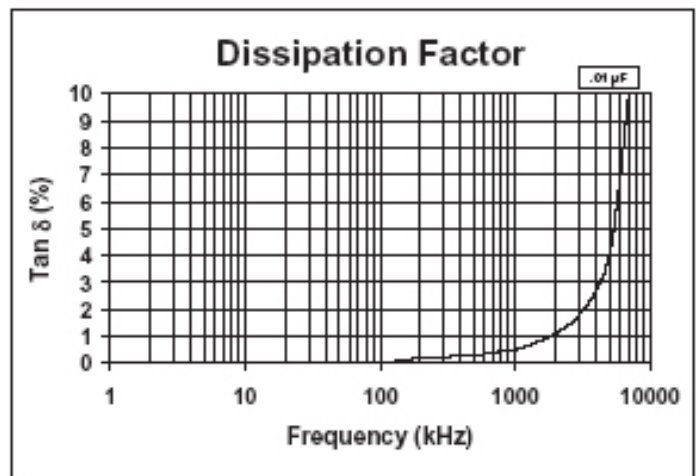
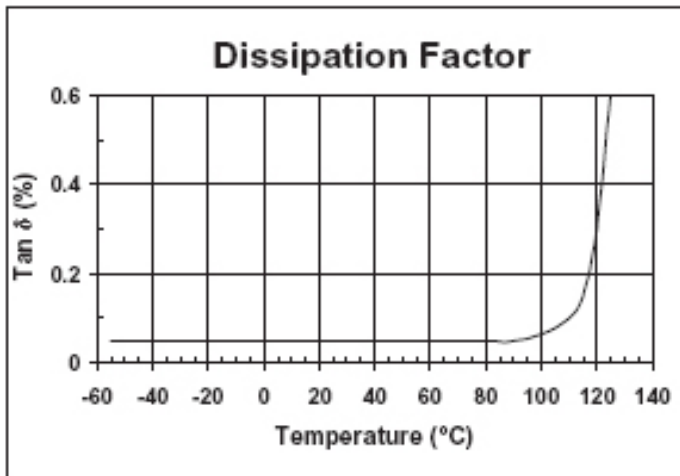
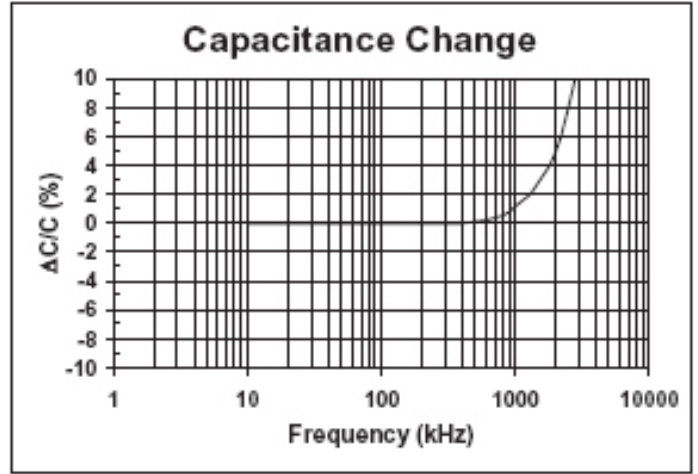
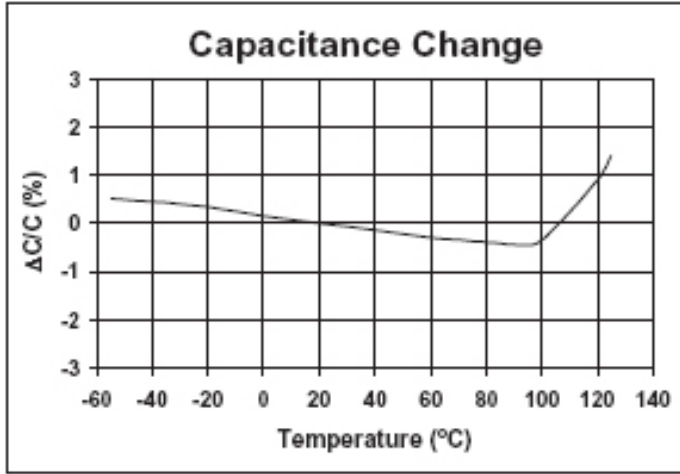
Capacitance			16 Vdc		50 Vdc	
(μ F)	(nF)	(pF)	Catalog Part Number	Case Code	Catalog Part Number	Case Code
.00010	.10	100	FCP0603C101J-K1	0603	FCP0805H101J-J1	0805
.00012	.12	120	FCP0603C121J-K1		FCP0805H121J-J1	
.00015	.15	150	FCP0603C151J-K1		FCP0805H151J-J1	
.00018	.18	180	FCP0603C181J-K1		FCP0805H181J-J1	
.00022	.22	220	FCP0603C221J-K1		FCP0805H221J-J1	
.00027	.27	270	FCP0603C271J-K1		FCP0805H271J-J1	
.00033	.33	330	FCP0603C331J-K1		FCP0805H331J-J1	
.00039	.39	390	FCP0603C391J-K1		FCP0805H391J-J1	
.00047	.47	470	FCP0603C471J-K1		FCP0805H471J-J1	
.00056	.56	560	FCP0603C561J-K1		FCP0805H561J-J1	
.00068	.68	680	FCP0603C681J-K1		FCP0805H681J-J1	
.00082	.82	820	FCP0603C821J-K1		FCP0805H821J-J1	
.0010	1.00	1000	FCP0603C102J-K1		FCP0805H102J-J1	
.0012	1.20	1200	FCP0603C122J-K1		FCP0805H122J-J1	
.0015	1.50	1500	FCP0603C152J-K1		FCP0805H152J-J1	
.0018	1.80	1800	FCP0603C182J-K1	FCP0805H182J-J1		
.0022	2.20	2200	FCP0603C222J-K1	FCP0805H222J-J1		
.0027	2.70	2700	FCP0603C272J-K1	FCP0805H272J-J1		
.0033	3.30	3300	FCP0805C332J-J1	805	FCP1206H332J-H1	1206
.0039	3.90	3900	FCP0805C392J-J1		FCP1206H392J-H1	
.0047	4.70	4700	FCP0805C472J-J1		FCP1206H472J-H1	
.0056	5.60	5600	FCP0805C562J-J1		FCP1206H562J-H1	
.0068	6.80	6800	FCP0805C682J-J1		FCP1206H682J-H1	
.0082	8.20	8200	FCP0805C822J-J2		FCP1206H822J-H2	
.010	10	10000	FCP0805C103J-J2	FCP1206H103J-H2		
.012	12	12000	FCP1206C123J-H1	1206	FCP1210H123J-G1	1210
.015	15	15000	FCP1206C153J-H1		FCP1210H153J-G1	
.018	18	18000	FCP1206C183J-H1		FCP1210H183J-G2	
.022	22	22000	FCP1206C223J-H1		FCP1210H223J-G2	
.027	27	27000	FCP1206C273J-H2		FCP1210H273J-G2	
.033	33	33000	FCP1206C333J-H2		FCP1210H333J-G3	
.039	39	39000	FCP1206C393J-H3		FCP1210H393J-G3	
.047	47	47000	FCP1206C473J-H3	FCP1913H473J-E1	1913	
.056	56	56000	FCP1210C563J-G2	FCP1913H563J-E1		
.068	68	68000	FCP1210C683J-G2	FCP1913H683J-E1		
.082	82	82000	FCP1210C823J-G3	FCP1913H823J-E2		
.100	100	100000	FCP1210C104J-G3	FCP1913H104J-E2		
.12	120	120000			FCP2416H124J-D1	2416
.15	150	150000			FCP2416H154J-D1	
.18	180	180000			FCP2416H184J-D3	
.22	220	220000			FCP2416H224J-D4	

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Typical Temperature Characteristics

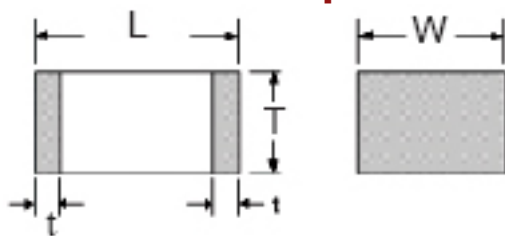
Typical Frequency Characteristics



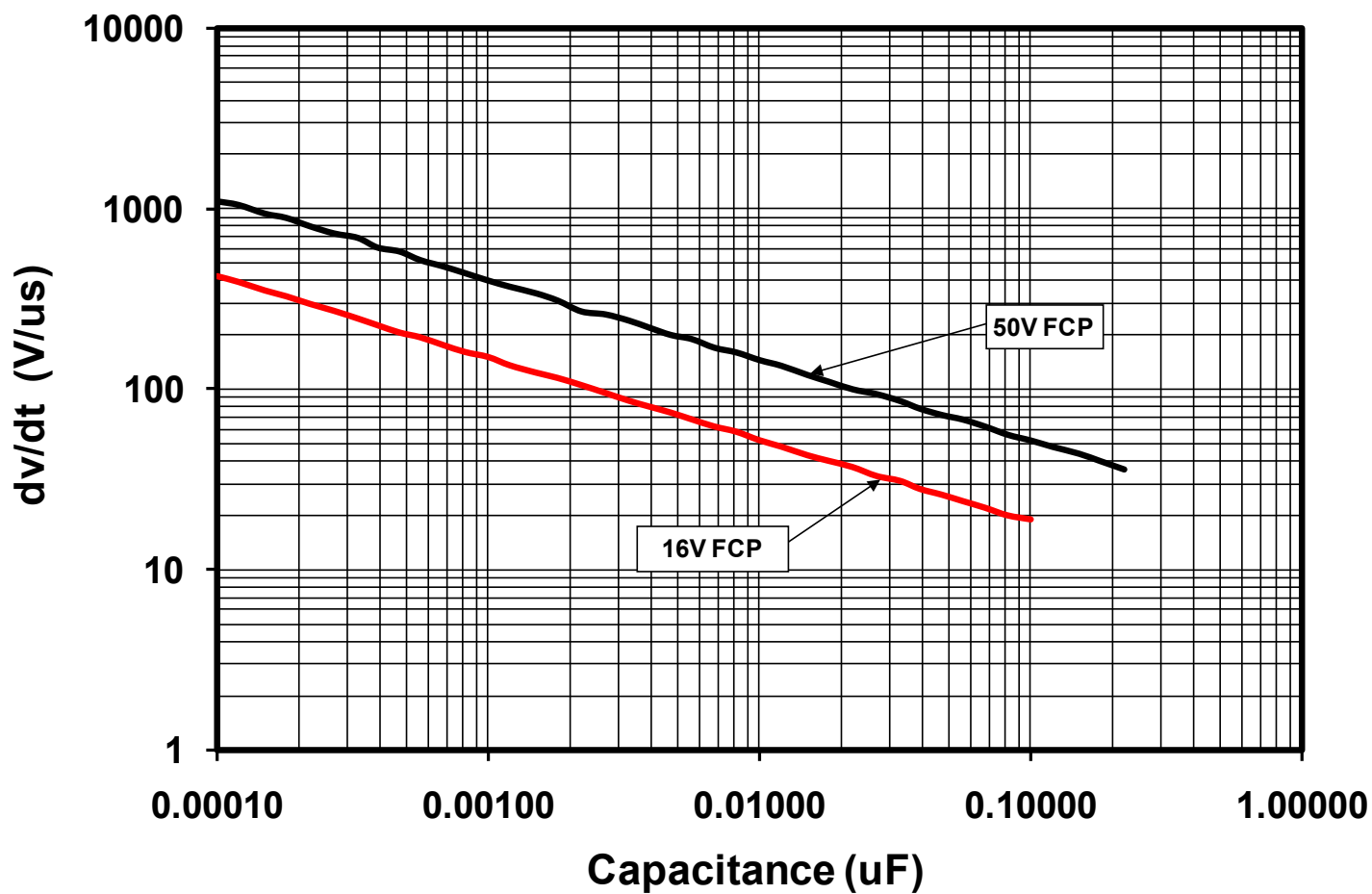
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Outline Dimensions

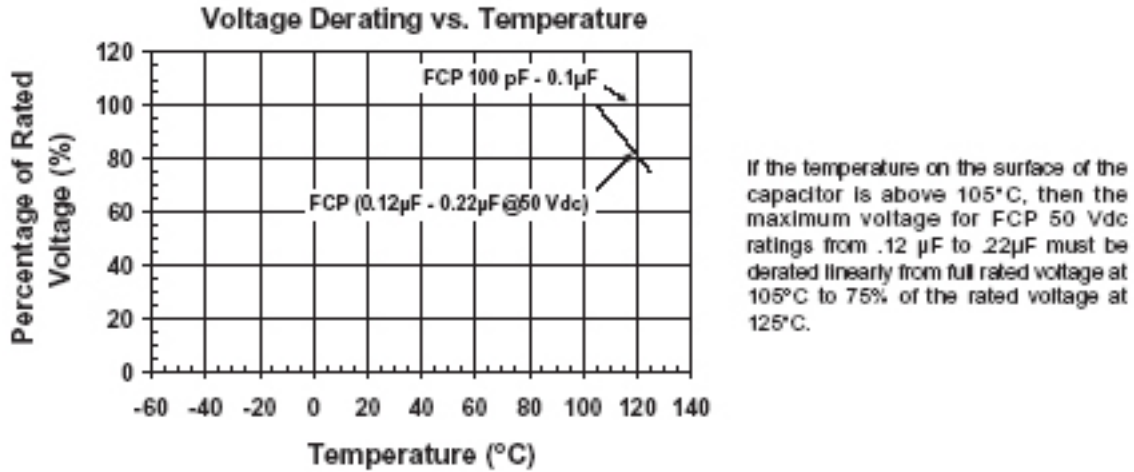


Case Code	Outline Dimensions (in.)				Case Code (metric)	Outline Dimensions (mm)				Packaging Code	
	L ±0.008	W	T ±0.008	t		L ±0.2	W	T ±0.2	t		
0603	0.063	0.032±0.006	0.028±0.006	0.014±0.008	1608	1.6	0.80±0.15	0.70±0.15	0.35±0.2	K1	
0805	0.079	0.049±0.008	0.035	0.018±0.010	2012	2.0	1.25±0.2	0.9	0.45±0.25	J1	
			0.043					1.1			J2
1206	0.126	0.063±0.008	0.035	0.026±0.012	3216	3.2	1.6±0.2	0.9	0.65±0.3	H1	
			0.043					1.1			H2
			0.059					1.5			H3
1210	0.126	0.098±0.008	0.043	0.026±0.012	3225	3.2	2.5±0.2	1.1	0.65±0.3	G1	
			0.059					1.5			G2
			0.083					2.1			G3
1913	0.189	0.130±0.012	0.059	0.031±0.012	4833	4.8	3.3±0.3	1.5	0.80±0.3	E1	
			0.083					2.1			E2
2416	0.236	0.161±0.012	0.075	0.031±0.012	6041	6.0	4.1±0.3	1.9	0.80±0.3	D1	
			0.098					2.5			D3
			0.110					2.8			D4

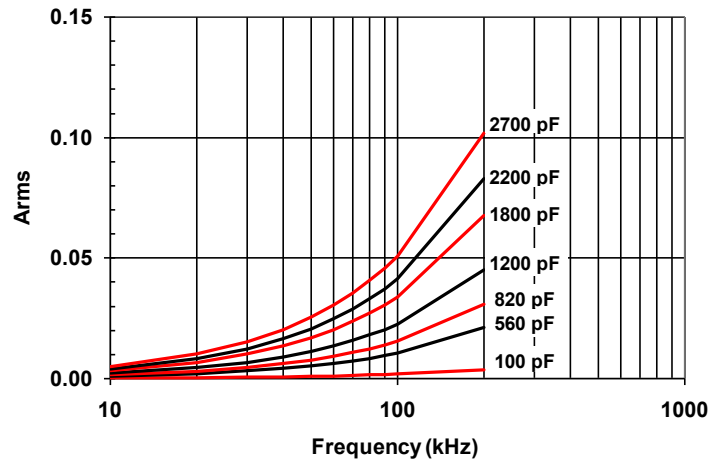
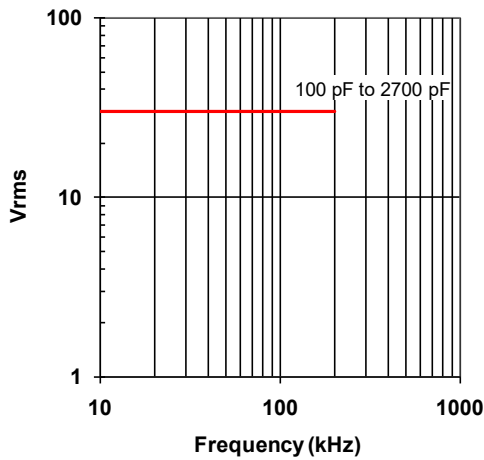


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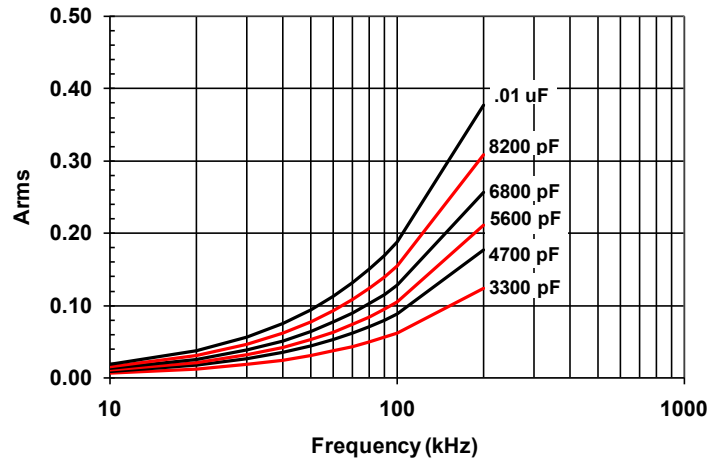
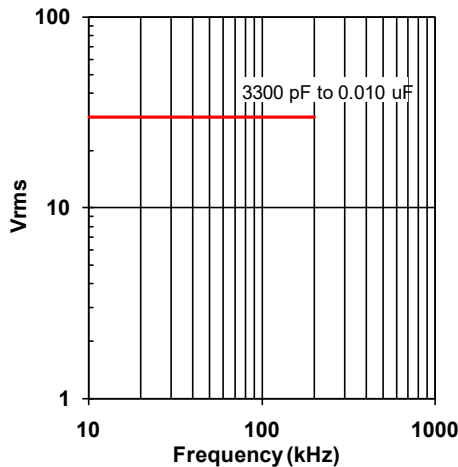
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FCP 0805 50 Vdc Rating Vrms and Arms vs. Frequency



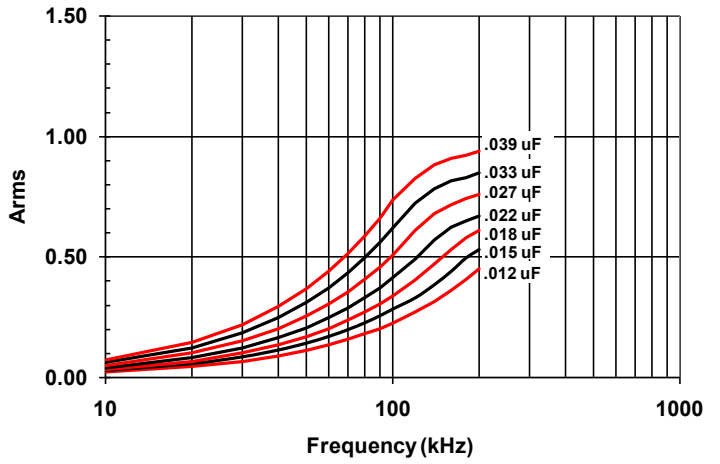
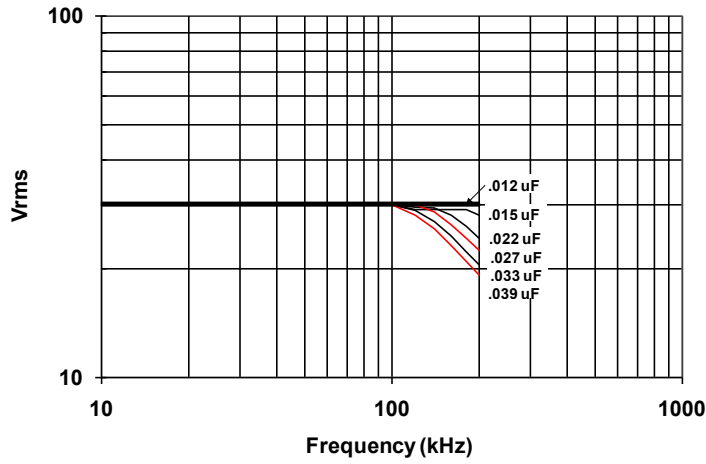
FCP 1206 50 Vdc Rating Vrms and Arms vs. Frequency



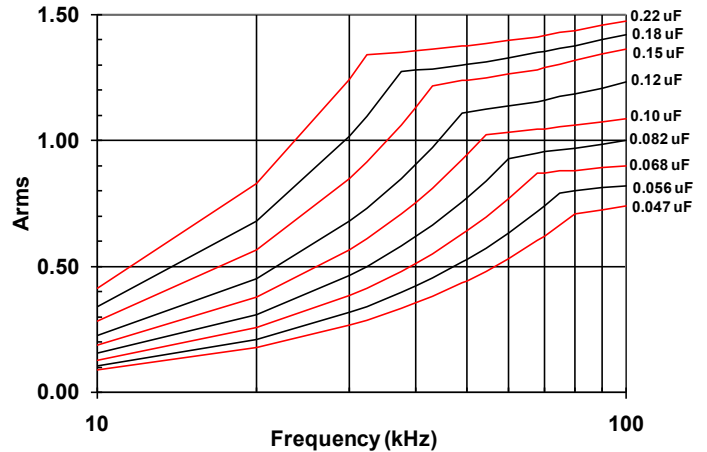
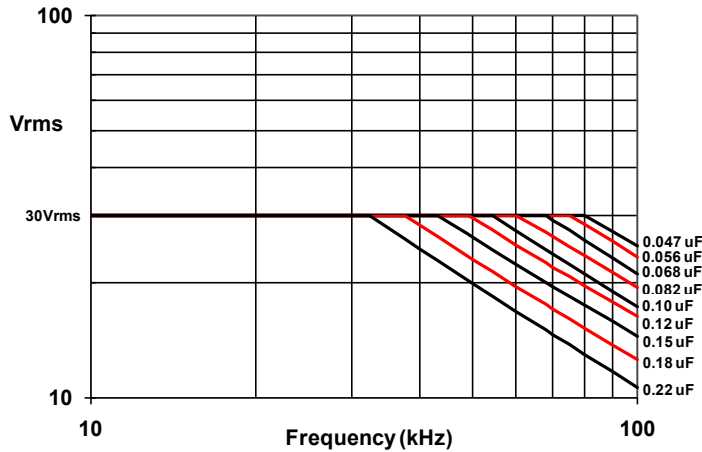
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Stable Stacked Metallized Film (PPS) Chips for Reflow Soldering

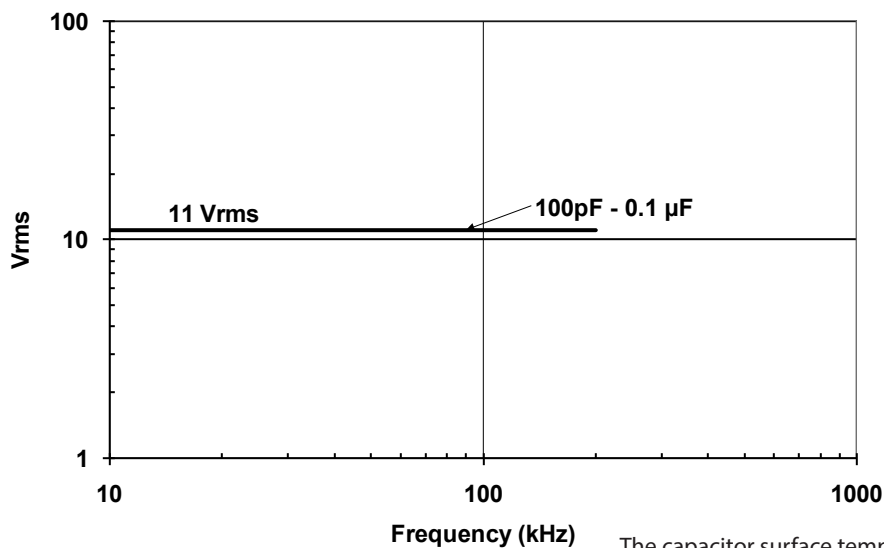
FCP 1210 50 Vdc Rating Vrms and Arms vs. Frequency



FCP 1913 & 2416 50 Vdc Rating Vrms and Arms vs. Frequency



Maximum AC Voltage FCP 16Vdc Series



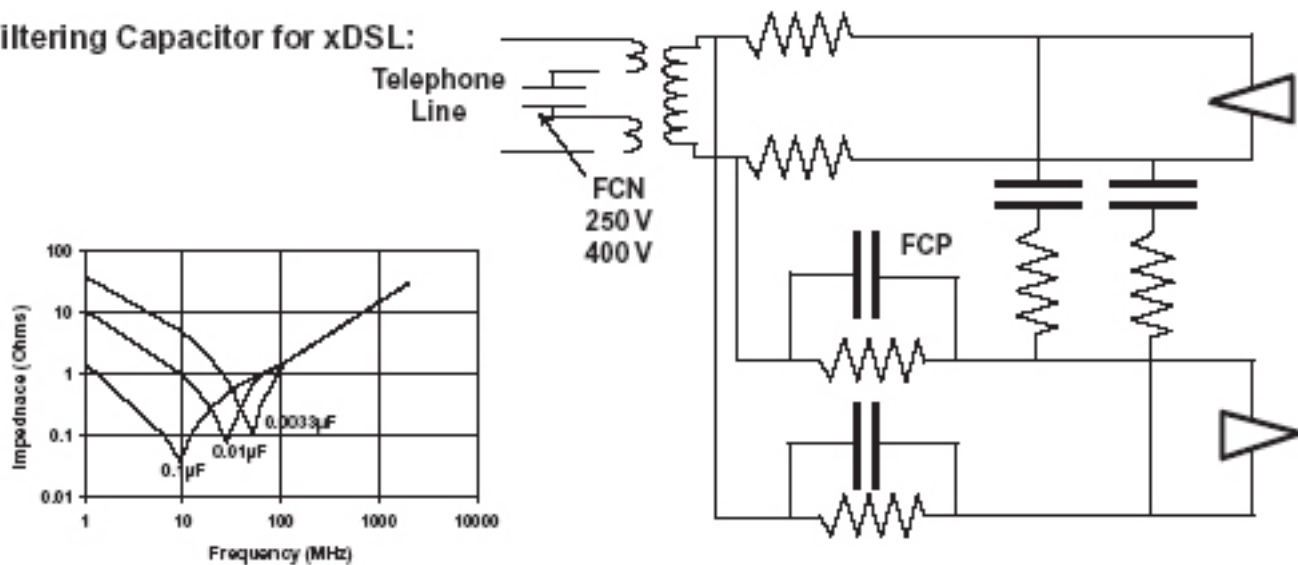
The capacitor surface temperature should not exceed 125 °C.

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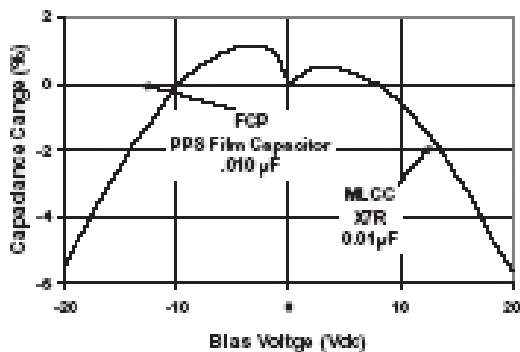
Stable Stacked Metallized Film (PPS) Chips for Reflow Soldering

Typical Applications

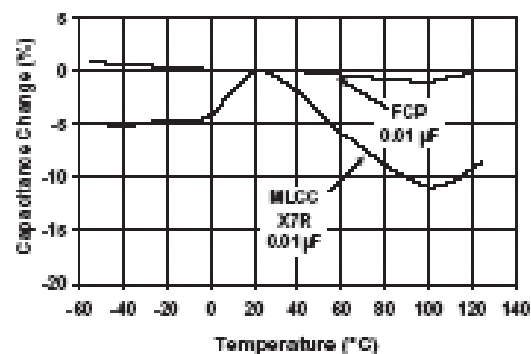
Filtering Capacitor for xDSL:



Capacitance Change vs. Bias Voltage

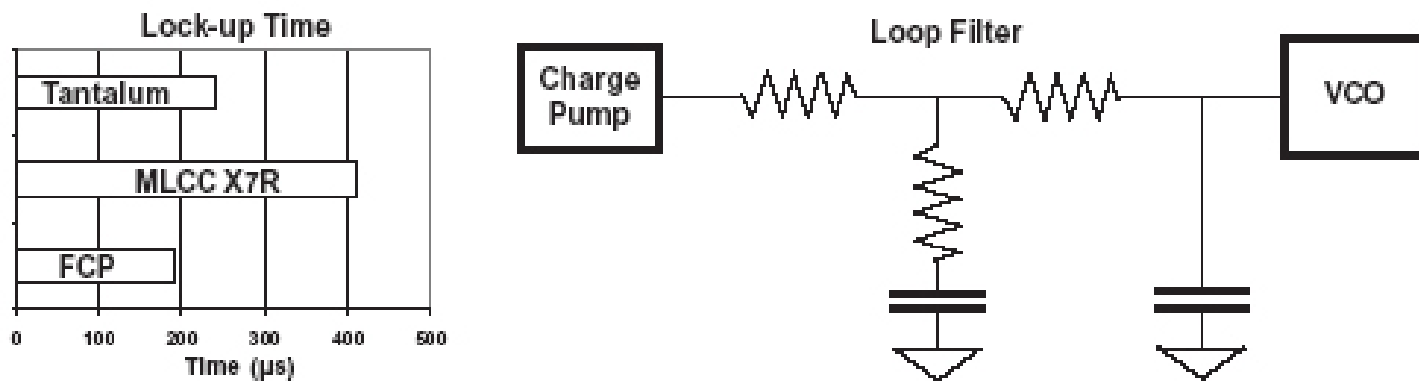


Capacitance Change vs. Temperature



The capacitance of SMT film chips is much more stable with applied voltage and with changes in temperature than multilayer ceramic capacitors. Add in the low ESR characteristics of film chips and the final result is improved performance in filter circuit applications.

PLL Circuit: Cellular phone, Blue Tooth, Data Communication Cards



In PLL circuit applications, FCP SMT film capacitor advantages are tight tolerance on the capacitance value, stable capacitance with temperature, faster lock-up times, and no noise due to piezoelectric effects.

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[FCP1210H273J-G2](#) [FCP0805H221J-J1](#) [FCP0805H102J-J1](#) [FCP1210H153J-G1](#) [FCP1210H183J-G2](#)
[FCP1206H103J-H2](#) [FCP0805H331J-J1](#) [FCP1210H393J-G3](#) [FCP1210H333J-G3](#) [FCP1206H332J-H1](#)
[FCP1206H472J-H1](#) [FCP0805H471J-J1](#) [FCP1913H473J-E1](#) [FCP0603C152J-K1](#) [FCP0603C221J-K1](#)
[FCP0805C682J-J1](#) [FCP1206C123J-H1](#) [FCP1206C223J-H1](#) [FCP1206C273J-H2](#) [FCP1206C473J-H3](#)
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