

For 600V to 5000V Applications

Capacitance Range	10 pF to 0.100 μ F (25°C, 1.0 $\pm$ 0.2 Vrms at 1kHz, for $\leq$ 1000 pF use 1 MHz)
Capacitance Tolerances	$\pm$ 5%, $\pm$ 10%, $\pm$ 20%
Dissipation Factor	0.1% max. (+25°C, 1.0 $\pm$ 0.2 Vrms, 1kHz, for $\leq$ 1000 pF use 1 MHz)
Operating Temperature Range	-55°C to +125°C
Temperature Characteristic	0 $\pm$ 30 ppm/°C (0VDC)
Voltage Ratings	600, 630, 1000, 1500, 2000, 2500, 3000, 4000 & 5000 VDC (+125°C)
Insulation Resistance (+25°C, at 500 VDC)	100K M Ω min. or 1000 M Ω - μ F min., whichever is less
Insulation Resistance (+125°C, at 500 VDC)	10K M Ω min. or 100 M Ω - μ F min., whichever is less
Dielectric Strength	Minimum 120% rated voltage for 5 seconds at 50 mA max. current

Case Size		0805		1206				1210						1808								1812								
Soldering		Reflow/Wave		Reflow/Wave				Reflow Only						Reflow Only								Reflow Only								
(L) Length	mm (in.)	2.10 ±0.20 (0.085 ±0.008)		3.30 ±0.30 (0.130 ±0.012)				3.30 ±0.40 (0.130 ±0.016)						4.60 ±0.50 (0.181 ±0.020)								4.60 ±0.50 (0.177 ±0.012)								
(W) Width	mm (in.)	1.25 ±0.20 (0.049 ±0.008)		1.60 +0.30/-0.10 (0.063 ±0.012/-0.004)				2.50 ±0.30 (0.098 ±0.012)						2.00 ±0.20 (0.079 ±0.008)								3.20 ±0.30 (0.126 ±0.008)								
(T) Thickness	mm (in.)	1.35 (0.053)		1.80 (0.071)				2.80 (0.110)						2.20 (0.087)								2.80 (0.100)								
(t) Terminal	min max	0.50 ±0.20 (0.020 ±0.008)		0.60 ±0.20 (0.024 ±0.008)				0.75 ±0.35 (0.030 ±0.014)						0.75 ±0.35 (0.030 ±0.014)								0.75 ±0.35 (0.030 ±0.014)								
Voltage(V)	600	630	1000	600	630	1000	1500	2000	600	630	1000	1500	2000	3000	600	630	1000	1500	2000	2500	3000	4000	600	630	1000	1500	2000	2500	3000	4000
Cap (pF)	5 0R5	A	C																											
	1.0 1R0	A	C																											
	1.2 1R2	A	C																											
	1.5 1R5	A	A	C	X	X	X	X																						
	1.8 1R8	A	A	C	X	X	X	X	X																					
	2.2 2R2	A	A	C	X	X	X	X	X																					
	2.7 2R7	A	A	C	X	X	X	X	X																					
	3.3 3R3	A	A	C	X	X	X	X	X																					
	3.9 3R9	A	A	C	X	X	X	X	X																					
	4.7 4R7	A	A	C	X	X	X	X	X																					
	5.6 5R6	A	A	C	X	X	X	X	X																					
	6.8 6R8	A	A	C	X	X	X	X	X																					
	8.2 8R2	A	A	C	X	X	X	X	X																					
	10 100	A	A	C	X	X	X	X	X	C	M	M	D	M	F	F	C	C	C	C	C	C	C	C	C	C	C	C	C	
	12 120	A	A	C	X	X	X	X	X	C	M	M	D	M	F	F	C	C	C	C	C	C	C	C	C	C	C	C	C	
	15 150	A	A	C	X	X	X	X	X	C	M	M	D	M	F	F	C	C	C	C	C	C	C	C	C	C	C	C	C	
	18 180	A	A	C	X	X	X	X	X	C	M	M	D	M	F	F	C	C	C	C	C	C	C	C	C	C	C	C	C	
	22 220	A	A	C	X	X	X	X	X	C	M	M	D	M	F	F	C	C	C	C	C	C	C	C	C	C	C	C	C	
	27 270	A	A	C	X	X	X	X	X	C	M	M	D	M	F	F	C	C	C	C	C	C	C	C	C	C	C	C	C	
	33 330	A	A	C	X	X	X	D	M	C	M	M	D	M	F	F	C	C	C	C	C	C	C	C	C	C	C	C	C	
	39 390	A	A	C	X	X	X	D	M	C	M	M	D	M	F	F	C													

NOTE: Contact factory for non-specified capacitance values



High Voltage MLC Chips

For 600V to 5000V Applications

NP0 (C0G) CAPACITANCE RANGE – PREFERRED SIZES ARE SHADED

Case Size	1825								2220								2225								3640										
Soldering	ReflowOnly								ReflowOnly								ReflowOnly								ReflowOnly										
(L) Length mm	4.60 ±0.50								5.70 ±0.50								5.70 ±0.50								9.14 ±0.25										
(L) Length (in.)	(0.181 ±0.020)								(0.224 ±0.020)								(0.225 ±0.010)								(0.360 ±0.010)										
(W) Width mm	6.30 ±0.40								5.00 ±0.40								6.30 ±0.40								10.2 ±0.25										
(W) Width (in.)	(0.248 ±0.016)								(0.197 ±0.016)								(0.250 ±0.010)								(0.400 ±0.010)										
(T) Thickness mm	3.40								3.40								3.40								2.54										
(T) Thickness (in.)	(0.134)								(0.134)								(0.100)								(0.100)										
(t) Terminal min	0.75 ±0.35								0.85 ±0.35								0.85 ±0.35								0.76 (0.030)										
(t) Terminal max	(0.030 ±0.014)								(0.033 ±0.014)								(0.033 ±0.014)								1.52 (0.060)										
Voltage (V)	600	630	1000	1500	2000	2500	3000	4000	600	630	1000	1500	2000	2500	3000	4000	5000	600	630	1000	1500	2000	2500	3000	4000	5000	600	630	1000	1500	2000	2500	3000	4000	5000
Cap (pF)	1.5	1R5																																	
	1.8	1R8																																	
	2.2	2R2																																	
	2.7	2R7																																	
	3.3	3R3																																	
	3.9	3R9																																	
	4.7	4R7																																	
	5.6	5R6																																	
	6.8	6R8																																	
	8.2	8R2																																	
	10	100	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F									
	12	120	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F									
	15	150	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F									
	18	180	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F									
	22	220	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F									
	27	270	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F									
	33	330	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F									
	39	390	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	F									
	47	470	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	G								6	
	56	560	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	G								6	
	68	680	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	G								6	
	82	820	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	G								6	
	100	101	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	120	121	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	150	151	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	180	181	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	220	221	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	270	271	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	330	331	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	390	391	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	470	471	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	560	561	E	E	G	E	F	F	F	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	680	681	E	E	G	E	F	F	G	E	E	E	E	E	F	F		E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	750	751	E	E	G	E	F	F	G	E	E	E	E	E	F	F		E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	820	821	E	E	G	E	F	F	G	E	E	E	E	E	F	F		E	E	E	E	E	F	E	G	G			G	G	G	G	G	6	
	1000	102	E	E	G	E	F	F	G	E	E	E	E	E	F	F		E	E	E	E	E	E	E	G	G			G	G	G	G	G	6	
	1200	122	E	E	G	E	F	G	G	E	E	E	E	E	G	G		E	E	E	E	E	F	F	G	G			G	G	G	G	G	6	
	1500	152	E	E	G	F	G	G	G	E	E	E	F	F	G	G		E	E	E	E	E	F	F	G	G			G	G	G	G	G	6	
	1800	182	E	E	G	F	G	G	G	E	E	E	F	F	G	G		E	E	E	E	E	G	G	G	G			G	G	G	G	G	6	
	2200	222	E	E	G	G	G	G	G	E	E	E	G	G	G	G		E	E	E	E	E	G	G	G	G			G	G	G	G	G	6	
	2700	272	E	E	G	G	G	G	G	E	E	E	G	G	G	G		E	E	E	F	F	G	G	G	G			G	G	G	G	G	6	
	3300	332	E	E	G	G	G			E	E	E	G	G				E	E	E	F	F	G	G	G	G			G	G	G	G	G	6	
	3900	392	E	E	G	G	G			E	E	E	G	G				E	E	E	G	G			G	G			G	G	G	G	G	6	
	4700	472	E	E	G	G	G			E	E	E	G	G				F	F	F	G	G			G	G			G	G	G	G	G	6	
	5600	562	F	F	G	G	G			F	F	F	G	G				F	F	F	G	G			G	G			G	G	G	G	G	6	
	6800	682	F	F	G	G	G			G	G	G	G	G				F	F	F	G	G			G	G			G	G	G	G	G	6	
	8200	822	F	F	G	G	G			G	G	G	G	G				G	G	G	G			G	G			G	G	G	G	G	6		
Cap (µF)	0.010	103	F	F	G	G				G	G	G						G	G	G	G			G	G			G	G	G	G				
	0.012	123	F	F	G					G	G	G						G	G	G			G	G			G	G	G						
	0.015	153	F	F						G	G							G	G	G			G	G			G	G	G						
	0.018	183	F	F						G	G							G	G	G			G	G			G	G	G						
	0.022	223	F	F						G	G							G	G	G			G	G			G	G	G						
	0.027	227	F	F						G	G							G	G	G			G	G			G	G							
	0.033	333	F	F						G	G							G	G	G			G	G			G	G							
	0.039	393	G	G						G	G							G	G	G			G	G			G	G							
	0.047	473	G	G						G	G							G	G	G			G	G			G	G							
	0.056	563	G	G						G	G							G	G	G			G	G			G	G							
	0.068	683	G	G														G	G	G															
	0.100	104																G	G	G															
Voltage (V)	600	630	1000	1500	2000	2500	3000	4000	600	630	1000	1500	2000	2500	3000	4000	5000	600	630	1000	1500	2000	2500	3000	4000	5000	600	630	1000	1500	2000	2500	3000	4000	5000
Case Size	1825								2220								2225								3640										

High Voltage MLC Chips

For 600V to 5000V Applications

X7R Dielectric

Performance Characteristics

Capacitance Range	10 pF to 0.82 μ F (25°C, 1.0 $\pm$ 0.2 Vrms at 1kHz)
Capacitance Tolerances	$\pm$ 10%; $\pm$ 20%; +80%, -20%
Dissipation Factor	2.5% max. (+25°C, 1.0 $\pm$ 0.2 Vrms, 1kHz)
Operating Temperature Range	-55°C to +125°C
Temperature Characteristic	$\pm$ 15% (0VDC)
Voltage Ratings	600, 630, 1000, 1500, 2000, 2500, 3000, 4000 & 5000 VDC (+125°C)
Insulation Resistance (+25°C, at 500 VDC)	100K M Ω min. or 1000 M Ω - μ F min., whichever is less
Insulation Resistance (+125°C, at 500 VDC)	10K M Ω min. or 100 M Ω - μ F min., whichever is less
Dielectric Strength	Minimum 120% rated voltage for 5 seconds at 50 mA max. current

X7R CAPACITANCE RANGE – PREFERRED SIZES ARE SHADED

Case Size	0805				1206				1210				1808						1812										
Soldering	Reflow/Wave				Reflow/Wave				Reflow Only				Reflow Only						Reflow Only										
(L) Length	2.10 ±0.20 (0.085 ±0.008)				3.30 ±0.30 (0.130 ±0.012)				3.30 ±0.40 (0.130 ±0.016)				4.60 ±0.50 (0.181 ±0.020)						4.60 ±0.50 (0.177 ±0.012)										
(W) Width	1.25 ±0.20 (0.049 ±0.008)				1.60 ±0.30/-0.10 (0.063 ±0.012/-0.004)				2.50 ±0.30 (0.098 ±0.012)				2.00 ±0.20 (0.079 ±0.008)						3.20 ±0.30 (0.126 ±0.008)										
(T) Thickness	1.35 (0.053)				1.80 (0.071)				2.80 (0.110)				2.20 (0.087)						2.80 (0.100)										
(t) Terminal	0.50 ±0.20 (0.020 ±0.008)				0.60 ±0.20 (0.024 ±0.008)				0.75 ±0.35 (0.030 ±0.014)				0.75 ±0.35 (0.030 ±0.014)						0.75 ±0.35 (0.030 ±0.014)										
Voltage(V)	600	630	1000	600	630	1000	1500	2000	600	630	1000	1500	2000	600	630	1000	1500	2000	2500	3000	4000	600	630	1000	1500	2000	2500	3000	4000
Cap (pF)	100	101	X	X	X	C	C	E	E	E	E	E	E																
	120	121	X	X	X	C	C	E	E	E	E	E	E																
	150	151	X	X	X	C	C	E	E	E	E	E	E																
	180	181	X	X	X	C	C	E	E	E	E	E	E																
	220	221	X	X	X	C	C	E	E	E	E	E	E																
	270	271	X	X	X	C	C	E	E	E	E	E	E									E	E	E	E	E			
	330	331	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E			
	390	391	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E			
	470	471	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	F	
	560	561	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	F	
	680	681	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	F	
	750	751	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	F	
	820	821	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	F	
	1000	102	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F	E	E	E	E	E	E	F	
	1200	122	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	F	
	1500	152	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
	1800	182	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
	2200	222	X	X	X	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
	2700	272	C	C	C	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
	3300	332	C	C	C	C	C	E	E	E	E	E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
	3900	392	C	C	C	C	C	E				E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
	4700	472	C	C	C	C	C	E				E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
	5600	562	C	C	C	C	C	E				E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
	6800	682	C	C	C	C	C	E				E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
	8200	822	C	C	C	C	C	E				E	E	E	E	E	E	E	E	F	F		E	E	E	E	E	G	
Cap (µF)	0.010	103	C	C		C	C	E				E	E	E								E	E	E	F	G	G		
	0.015	153	C	C		E	E	E				E	E	E								E	E	E	F	G			
	0.018	183	C	C		E	E	E				E	E	E								E	E	E	G				
	0.022	223	C	C		E	E	E				E	E	E								E	E	E	G		G		
	0.027	273				E	E	E				E	E	E								E	E	E					
	0.033	333				E	E					E	E	E	G							E	E	E	G				
	0.039	393										E	E	E								E	E	E	G				
	0.047	473				E	E					E	E	F								E	E	E	G				
	0.056	563				E	E					F	F	G								F	F	F	G				
	0.068	683										F	F	G								F	F	F	G				
	0.082	823										F	F									F	F	G					
	0.100	104										F	F									F	F	G					
	0.150	154										G	G									G	G						
	0.220	224																				G	G						
	0.270	274																				G	G						
	0.330	334																				G	G						
	0.390	394																											
	0.470	474																											
	0.560	564																											
	0.680	684																											
	0.820	824																											
	1.000	105																											
Voltage(V)	600	630	1000	600	630	1000	1500	2000	600	630	1000	1500	2000	600	630	1000	1500	2000	2500	3000	4000	600	630	1000	1500	2000	2500	3000	4000
Case Size	0805				1206				1210				1808						1812										

Letter	A	C	E	F	G	X	7
Max. Thickness	0.813 (0.032)	1.448 (0.057)	1.8034 (0.071)	2.2098 (0.087)	2.794 (0.110)	0.940 (0.037)	3.30 (0.130)

NOTE: Contact factory for non-specified capacitance values

High Voltage MLC Chips

For 600V to 5000V Applications

X7R CAPACITANCE RANGE
PREFERRED SIZES ARE SHADED

Case Size	1825								2220								2225								3640										
Soldering	ReflowOnly								ReflowOnly								ReflowOnly								ReflowOnly										
(L) Length	4.60 ±0.50								5.70 ±0.50								5.70 ±0.50								9.14 ±0.25										
(mm)	(0.181 ±0.020)								(0.224 ±0.020)								(0.225 ±0.010)								(0.360 ±0.010)										
(W) Width	6.30 ±0.40								5.00 ±0.40								6.30 ±0.40								10.2 ±0.25										
(in.)	(0.248 ±0.016)								(0.197 ±0.016)								(0.250 ±0.010)								(0.400 ±0.010)										
(T) Thickness	3.40								3.40								3.40								2.54										
(in.)	(0.134)								(0.134)								(0.100)								(0.100)										
(t) Terminal	0.75 ±0.35								0.85 ±0.35								0.85 ±0.35								0.76 (0.030)										
min	(0.030 ±0.014)								(0.033 ±0.014)								(0.033 ±0.014)								1.52 (0.060)										
max																																			
Voltage(V)	600	630	1000	1500	2000	2500	3000	4000	600	630	1000	1500	2000	2500	3000	4000	5000	600	630	1000	1500	2000	2500	3000	4000	5000	600	630	1000	1500	2000	2500	3000	4000	5000
Cap (pF)	100	101																																	
	120	121																																	
	150	151																																	
	180	181																																	
	220	221																																	
	270	271																																	
	330	331																																	
	390	391																																	
	470	471																																	
	560	561																																	
	680	681																																	
	750	751																																	
	820	821																																	
	1000	102	F	F	F	F	F	F	F	F	F	F	F	F	F	G	F		F	F	F	F	F	F	F	F		G	G	G	G	G	G	G	G
	1200	122	F	F	F	F	F	F	F	G	F	F	F	F	F	G	G		F	F	F	F	F	F	F	G		G	G	G	G	G	G	G	G
	1500	152	F	F	F	F	F	F	F	G	F	F	F	F	F	G	G		F	F	F	F	F	F	F	G		G	G	G	G	G	G	G	G
	1800	182	F	F	F	F	F	F	F	G	F	F	F	F	F	G	G		F	F	F	F	F	F	F	G		G	G	G	G	G	G	G	G
	2200	222	F	F	F	F	F	F	F		F	F	F	F	F	G			F	F	F	F	F	F	F			G	G	G	G	G	G	G	G
	2700	272	F	F	F	F	F	F	F		F	F	F	F	F	G			F	F	F	F	F	F	F			G	G	G	G	G	G	G	G
	3300	332	F	F	F	F	F	F	F		F	F	F	F	F	G			F	F	F	F	F	F	F			G	G	G	G	G	G	G	G
	3900	392	F	F	F	F	F	F	F		F	F	F	F	F	G			F	F	F	F	F	F	F			G	G	G	G	G	G	G	G
	4700	472	F	F	F	F	F	F	F		F	F	F	F	F	G			F	F	F	F	F	F	F			G	G	G	G	G	G	G	G
	5600	562	F	F	F	F	F	F	F		F	F	F	F	F	G			F	F	F	F	F	F	F			G	G	G	G	G	G	G	G
	6800	682	F	F	F	G	G	G	G		F	F	F	F	F	G	G		F	F	F	F	F	G	G			G	G	G	G	G	G	G	G
	8200	822	F	F	F	G	G	G	G		F	F	F	G	G	G			F	F	F	F	G	G	G			G	G	G	G	G	G	G	G
Cap (µF)	0.010	103	F	F	F	G	G	G	G		F	F	F	G	G	G			F	F	F	F	G	G	G			G	G	G	G	G	G	G	G
	0.015	153	F	F	F	G	G	7			F	F	F	G	G	7			F	F	F	G	G	G	G			G	G	G	G	G	G	G	G
	0.018	183	F	F	F	G	G	7	7		F	F	F	G	G	G	7		F	F	F	G	G	G	7			G	G	G	G	G	G	G	G
	0.022	223	F	F	F	G	G				F	F	F	G	G				F	F	F	G	G	G				G	G	G	G	G	G	G	G
	0.027	273	F	F	F	G	7				F	F	F	G	G				F	F	F	G	G					G	G	G	G	G	G	G	G
	0.033	333	F	F	F	G	7				F	F	F	G	7				F	F	F	G	G					G	G	G	G				
	0.039	393	F	F	F	G	7				F	F	F	G	7				F	F	F	G						G	G	G	G				
	0.047	473	F	F	F	G	7				F	F	F	G	7				F	F	F	G						G	G	G	G				
	0.056	563	F	F	F	G	7				F	F	F	G	7				F	F	F	G						G	G	G	G				
	0.068	683	F	F	G						F	F	G						F	F	F	G						G	G	G	G				
	0.082	823	F	F	G						F	F	G						F	F	G	7						G	G	G	G				
	0.100	104	F	F	G						F	F	G						F	F	G	7						G	G	G	G				
	0.150	154	F	F	7						F	F	G						F	F	G	7						G	G	G					
	0.220	224	F	F	7						F	F	G						F	F	7							G	G	G					
	0.270	274	F	F	7						F	F	7						F	F	7							G	G						
	0.330	334	F	F	7						F	F	7						F	F	7							G	G						
	0.390	394	F	F							F	F	7						F	F	7							G	G						
	0.470	474	F	F							F	F							F	F								G	G						
	0.560	564	G	G							G	G							F	F								G	G						
	0.680	684	G	G							G	G							G	G								G	G						
	0.820	824	7	7							7	7							G	G															
	1.000	105									7	7							G	G															
Voltage(V)	600	630	1000	1500	2000	2500	3000	4000	600	630	1000	1500	2000	2500	3000	4000	5000	600	630	1000	1500	2000	2500	3000	4000	5000	600	630	1000	1500	2000	2500	3000	4000	5000
Case Size	1825								2220								2225								3640										