Life Test Data — 938-280002 Film (1X 1.35 mil P.A) Capacitors

Test Conditions, Tan δ, Capacitance, Failure Times

Test Started 1-2-73

Temp, °C	RT	70°		70°	
~~Voltage~~	300	375		375	
~~Time, hrs~~	0	504		672	
1X Column Treated MIBP	.00026	.00069			
	1.820 mfd	1.757			
	1 Shorted @200V.	72.5 hrs.		568.0 hrs	
		265.7		568.0	568.0
				568.0	10K
1X Column Treated MIBP + 0.3% Unox 221	.00026	.00048			
	1.787 mfd	1.738			
		1.0 hrs.	265.7	568.0 hrs	568.0
		1.0		568.0	10K
				568.0	
1X Column Treated Aroclor 1016 + 0.3% Unox 221	.00049	.00076			
	2.015 mfd	1.959			
	1 Shorted @ 200V	52.5 hrs.		582.0 hrs.	
		70.5		4 OK	
1X Treated MCS 1238	.00047				
	1.965 mfd	0.5 hrs.	31.5	235.0	
		0.5	88.0	316.0	
		0.5	88.3		
1X Treated MCS 1238 + 0.3% Unox 221	.00049	.00092			
	1.938 mfd	1.880			
		10.5 hrs.		568.5 hrs	593.5
		88.5		568.5	593.5
				568.5	1 OK
1X Treated A-225 + 0.3% Unox 221	.00034	.00044			
	1.786 mfd	1.745			
		1.0 hr.	69.0	568.5 hrs.	
		1.0		593.5	
				593.5	20K
H-230 L + 0.3% Unox 221	.00027	.00034			
	1.764 mfd	1.726			
	Shorted @ 150V	0.5 hrs.		593.5 hrs.	
	Shorted @ 250V	22.5		593.5	
	1 Leaks	32.25			

DSW 283962

STLCOPCB4065381

Life Test Data — 938-280002 Film ("RR") Capacitors

Test Conditions, Tan δ, Capacitance, Failure Times

Test Started 1-2-73

Temp, °C	RT	70°	70°	70°	70°	
Voltage	300	375	375	375	375	
Time, hrs	0	168	336	504	672	
1X Column Treated MIBP (Imp. 12-5-72) Capacitors						
#1	Shorted @ 200V					
mfd						
#2	.00023	.00051	.00044	.00050		
mfd	1.778	1.746	1.746	1.747		568 hrs.
#3	.00036	.00058				
mfd	1.812	1.779				
			265.66 hrs.			
#4	.00022	.00057	.00051	.00062		
mfd	1.742	1.711	1.711	1.711		568 hrs.
#5	.00022					
mfd	1.912					
		72.5 hrs.				
#6	.00024	.00061	.00055	.00059		
mfd	1.819	1.786	1.786	1.787		568 hrs
#7	.00056	.00081	.00074	.00076		
mfd	1.862	1.815	1.813	1.812		
#8	.00023	.00063	.00060	.00058		
mfd	1.812	1.726	1.726	1.726		568 hrs.
Avg	.00026	.00062	.00057	.00069		
mfd.	1.820	1.761	1.756	1.757		

DSW 283963

STLCOPCB4065382

Life Test Data — 938-280002 Film (1X .25 mil P.P.) Capacitors

Test Conditions, Tan δ, Capacitance, Failure Times

Test Started 1-2-73

Temp, °C	RT	70°	70°	70°	70°	
Voltage	300	375	375	375	375	
Time, hrs	0	168	336	504	672	
1X Column Treated						
MIBP + 0.3% Unox 221						
(Emp. 12-6-72)						
Capacitors						
#1	.00025					
mfd	1.809	1.0 hrs.				
#2	.00022	.00044	.00040	.00041		
mfd	1.732	1.701	1.701	1.702	568 hrs.	
#3	.00053					
mfd	1.808	1.0 hrs.				
#4	.00022	.00051	.00046	.00047		
mfd	1.767	1.734	1.734	1.734	568 hrs	
#5	.00022	.00055				
mfd	1.892	1.860	265.66 hrs.			
#6	.00021	.00057	.00060	.00049		
mfd	1.755	1.722	1.721	1.722		
#7	.00022	.00058	.00053	.00051		
mfd	1.773	1.742	1.742	1.742	568 hrs.	
#8	.00023	.00060	.00054	.00054		
mfd	1.756	1.782	1.782	1.782	568 hrs.	
Avg.	.00026	.00054	.00051	.00048		
mfd.	1.787	1.757	1.736	1.738		

DSW 283964

STLCOPCB4065383

Life Test Data – 938-280002 Film (1X.25 Mil P.P.) Capacitors

Test Conditions, Tan δ, Capacitance, Failure Times

Test Started 1-2-73

Temp, °C	RT	70°	70°	70°	70°
Voltage	300	375	375	375	375
Time, hrs.	0	168	336	504	672

1X Column Treated
Aroclor 1016 Lot KA-720
+0.3% Unox 221
(Imp. 12-12-72)

Capacitors

#1	.00051	.00054	.00057	.00062	
ufd	1.945	1.885	1.887	1.888	582 hrs.
#2	shorted @ 200V				
ufd					
#3	.00051	.00084	.00078	.00073	
ufd	2.093	2.029	2.031	2.032	
#4	.00051	.00079	.00077	.00073	
ufd	2.123	2.058	2.059	2.061	
#5	.00048				
ufd	1.882	52.5 hrs.			
#6	.00051	.00074	.00073	.00081	
ufd	1.940	1.880	1.881	1.882	
#7	.00048				
ufd	2.133	70.5 hrs.			
#8	.00051	.00078	.00077	.00081	
ufd	1.989	1.927	1.929	1.930	
Avg.	.00049	.00074	.00072	.00076	
ufd	2.015	1.956	1.957	1.959	

DSW 283965

STLCOPCB4065384

Life Test Data – 938-280002 Film (1X .25 Mil P.P.) Capacitors

Test Conditions, Tan δ, Capacitance, Failure Times

Test Started 1-2-73

Temp, °C	RT	70°	70°
~~Voltage~~	300	375	375
~~Time, hrs~~	0	168	336

1 X Treated
MCS 1238
(Imp. 12-14-72)
Capacitors

#1 ufd	.00045 2.023	.00259 1.963	316.0 hrs
#2 ufd	.00045 2.028	0.5 hrs.	
#3 ufd	.00044 1.959	0.5 hrs.	
#4 ufd	.00045 1.899	88.33 hrs.	
#5 ufd	.00046 1.900	31.5 hrs.	
#6 ufd	.00049 2.057	0.5 hrs.	
*#7 ufd	.00059 1.898	.00161 1.837	235.0 hrs.
#8 ufd	.00041 1.956	88.0 hrs	
Avg ufd	.00047 1.965	.00210 1.900	

* Leaks at the top of the silicone rubber insulator

DSW 283966

STLCOPCB4065385

Life Test Data – 938-280002 Film (1X.25M·1 P.P.) Capacitors

Test Conditions, Tan δ, Capacitance, Failure Times

Test Started 1-2-73

Temp, °C	RT	70°	70°	70°	70°	
Voltage	300	375	375	375	375	
Time, hrs	0	168	336	504	672	
1X Treated MCS1238 +0.3% Unox 221 (Imp. 12-19-72) Capacitors						
#1	.00077					
mfd	1.970	88.5 hrs.				
#2	.00050	.00089	.00095	.00099		
mfd	1.964	1.903	1.898	1.896		
#3	.00044	.00074	.00074	.00082		
mfd	1.923	1.867	1.862	1.860	568.5	
#4	.00057	.00082	.00085	.00085		
mfd	1.851	1.795	1.791	1.789	593.5	
#5	.00042	.00094	.00094	.00098		
mfd	1.944	1.884	1.880	1.877	593.5	
#6	.00043	.00090	.00089	.00094		
mfd	1.974	1.916	1.911	1.907	568.5	
#7	.00040	.00093	.00092	.00094		
mfd	2.021	1.959	1.955	1.953	568.5	
#8	.00041					
mfd	1.855	10.5 hrs.				
Avg	.00049	.00089	.00088	.00092		
mfd	1.938	1.887	1.883	1.880		

DSW 283967

STLCOPCB4065386

Life Test Data – 938-280002 Film (1X.25MIL P.P.) Capacitors
Test Conditions, Tan δ, Capacitance, Failure Times

Test Started 1-2-73

Temp, °C	RT	70°	70°	70°	70°	
Voltage	300	375	375	375	375	
Time, hrs.	0	168	336	504	672	
1 X Treated						
A 225						
+0.3% Unox 221						
(Imp. 12-20-72)						
Capacitors						
#1	.00023	.00037	.00036	.00037		
ufd	1.725	1.693	1.693	1.693	593.5 hrs.	
#2	.00034	.00041	.00041	.00042		
ufd	1.790	1.758	1.758	1.758		
#3	.00028	.00045	.00044	.00046		
ufd	1.807	1.775	1.774	1.774	593.5 hrs.	
#4	.00037	.00045	.00045	.00046		
ufd	1.848	1.816	1.815	1.816	568.5 hrs.	
#5	.00059					
ufd	1.849	1.0 hrs.				
#6	.00024					
ufd	1.811	1.0 hrs.				
#7	.00045					
ufd	1.740	69.0 hrs.				
#8	.00018	.00046	.00046	.00047		
ufd	1.716	1.682	1.682	1.682		
Avg	.00034	.00043	.00042	.00044		
ufd	1.786	1.745	1.744	1.745		

DSW 283968

STLCOPCB4065387