A.C.L . Mica Capacitors

Technical Data Summary

AQL Acceptable Quality Level
C Permitted No. of defects
N Sample size

IL Inspection Level
P Periodicity in months

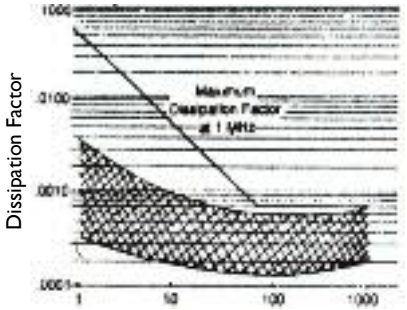

Fig. 1

Dipped Radials and Moulded Axials

Dissipation factor of 90% of the capacitors will fall within the hatched area.

Figs. 1 and 2: Dissipation Factor vs Capacitance

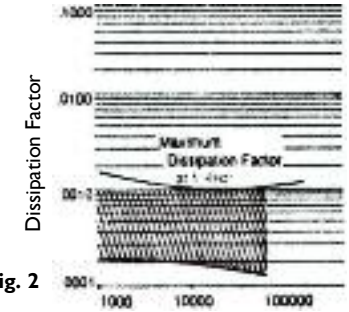

Fig. 2

AQL or C/N	II or P	Dipped Radial	Moulded Axial	Moulded Radial	Miniature Dipped	Moulded Axial (CM47 & CM52)
Dimensions & Visual						
1%	II	--- As per details listed for different styles ---				
Capacitance Tolerance						
0.65%	II	+ - 0.5pF + - 1.0pF + - 0.5% + - 1% + - 2% + - 5% + - 10% + - 20% (Minimum practical tolerance available is greater of + - 0.5% or + - 0.5pF)				
Measurement Frequency						
		C≤ 1000pF at MHz C≤ 1000pF at 1KHz				
Dissipation Factor						
0.65%	II	See figures 1 & 2		**C(pF) DF** ≤ 100 0.003 > 100 0.001 ≤ 10000 0.001 > 10000 0.0007	**C(pF) DF** ≤ 50 0.01 > 50 0.005	**C(pF) DF** ≤ 100 0.003 > 100 0.001 ≤ 10000 0.001 > 10000 0.0007
Voltage Proof / Dielectric Withstanding Voltage						
0.65%	II	Twice the rated voltage for 1 – 5 seconds			Twice the rated voltage for 1 – 3 seconds	
Rated D.C. Voltage						
		100 125 250 300 500 1000 ≤1500				
Allowed A.C. Voltage (50Hz)						
		40 80 175 150 250 350 500 (D.C. voltage ratings are given in detailed listings and should not be exceeded by the sum of D.C. and peak A.C. voltages)				
Insulation Resistance						
0.65%	II	100 G for C≤ 10000pF 1000 megohm-microfarad for C≤ 10000pF at 25 C				
Temperature Coefficient and Capacitance Drift						
2.5%	S3	C D E F	C D E F	C D E F	D	C D E F

AQL or C/N	II or P	Dipped Radial	Moulded Axial	Moulded Radial	Miniature Dipped	Moulded Axial (CM47 & CM52)
Operating Temperature						
		O P	N O	L O	O	L
Climatic Category						
		55 / 125 / 56 55 / 150 / 56	55 / 85 / 56 55 / 125 / 56	40 / 85 / 21 55 / 125 / 21	55 / 125 / 21	40 / 85 / 21
Resistance to Solvents						
		MIL-STD-202 Method 215 JSS-50101 Test 16				
Solderability						
2.5%	S3	(Solder Bath method) MIL-STD-202 Method 208 JSS-50101 Test 19 IEC-68-2-20 Ta				
Impact (Bump)						
1 / 12	3	JSS-50101 Test 11				
Robustness of Terminations / Terminal Strength						
1 / 12	3	MIL-STD-202 Method 211 JSS-50101 Test 17 Procedure I, II, and IV as applicable IEC-68-2-21 Ua Ub Uc				
Resistance to Soldering Heat						
1 / 9	6	MIL-STD-202 Method 210 Condition B JSS-50101 Test 15 Procedure I IEC-68-2-20 Tb Method 1A				
Vibration						
1 / 18	6	MIL-STD-202 Method 204 Condition D JSS-50101 Test 23 (V-14) IEC-68-2-6				
Impact (Shock)						
1 / 18	6	MIL-STD-202 Method 213 JSS-50101 Test 12 IEC-68-2-27				
Damp Heat (Steady State)						
1 / 15	6	JSS-50101 Test 7 Severity H-13 IEC-68-2-3				
Damp Heat (Cyclic) / Moisture Resistance						
1 / 18	6	MIL-STD-202 Method 106 JSS-50101 Test 5 IEC-68-2-30				
Acceleration (Steady State)						
1 / 18	6	JSS-50101 Test 1 Severity A12				
Barometer Pressure / Air Pressure (Low)						
2 / 27	6	MIL-STD-202 Method 105 Condition D JSS-50101 Test 2 (P19) IEC-68-2-13				
Endurance / Life						
1 / 21	6	MIL-STD-202 Method 108 JSS-50101 Test 13 IEC-348-1				
Temperature Cycling / Rapid Change of Temperature						
1 / 18	6	MIL-STD-202 Method 107 JSS-50101 Test 20 Procedure I IEC-68-2-14				