

F98 Series

Resin-Molded Chip, High CV Undertab

CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage								*Cap Code
μF	Code	2.5 (0e)	4V (0G)	6.3V (0J)	10V (1A)	16V (1C)	20V (1D)	25V (1E)	35V (1V)	
0.47	474					U				N
1.0	105					M	M	M	S	A
2.2	225				M/U	M				J
4.7	475		U	M/U	M/U**	M				S
10	106		U	M/U**	M	S				a
15	156		U							e
22	226		M/U**	M	M**/S					J
33	336		M	M	M**/S					n
47	476	M	M	M/S	S					s
68	686		M/S							w
100	107		M/S	M*4/S						A
220	227		S							J

Released ratings

*4 (AXE) Rated temperature 60°C and H dimension 1.0mm Max. Please contact AVX when you need detail spec.

** (LZT) Rated temperature 60°C. Please contact AVX when you need detail spec.

Please contact to your local AVX sales office when these series are being designed in your application.

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL (μA)	DF @ 120Hz (%)	ESR @ 100kHz (Ω)	100kHz RMS Current (mA)				*1 ΔC/C (%)	MSL
							25°C	60°C	85°C	125°C		
2.5 Volt												
F980E476MMA	M	47	2.5	1.2	30	4	79	—	71	32	±30	3
4 Volt												
F980G475MUA	U	4.7	4	0.5	20	20	27	—	25	11	±30	3
F980G106MUA	U	10	4	0.8	25	20	27	—	25	11	±30	3
F980G156MUA	U	15	4	9.0	40	25	24	—	22	10	±30	3
F980G226MMA	M	22	4	0.9	15	7.5	58	—	52	23	±30	3
F980G226MUALZT	U	22	4	25.0	40	20	27	25	—	11	±30	3
F980G336MMA	M	33	4	1.3	30	4	79	—	71	32	±30	3
F980G476MMA	M	47	4	1.9	40	8	56	—	50	22	±30	3
F980G686MMA	M	68	4	27.2	50	10	50	—	45	20	±30	3
F980G686MSA	S	68	4	2.7	30	4	106	—	95	42	±30	3
F980G107MMA	M	100	4	80.0	60	10	50	—	45	20	±30	3
F980G107MSA	S	100	4	4.0	35	4	106	—	95	42	±30	3
F980G227MSA	S	220	4	132	80	5	95	—	85	38	±30	3
6.3 Volt												
F980J475MMA	M	4.7	6.3	0.5	20	7.5	58	—	52	23	±30	3
F980J475MUA	U	4.7	6.3	0.6	20	20	27	—	25	11	±30	3
F980J106MMA	M	10	6.3	0.6	8	6	65	—	58	26	±30	3
F980J106MUALZT	U	10	6.3	6.3	30	30	22	20	—	9	±30	3
F980J226MMA	M	22	6.3	1.4	20	6	65	—	58	26	±30	3
F980J336MMA	M	33	6.3	4.2	35	8	56	—	50	22	±30	3
F980J476MMA	M	47	6.3	29.6	45	10	50	—	45	20	±30	3
F980J476MSA	S	47	6.3	3.0	25	6	87	—	78	35	±30	3
F980J107MMAAXE	M	100	6.3	126	80	10	50	45	—	20	±30	3
F980J107MSA	S	100	6.3	63.0	50	8	75	—	68	30	±30	3
10 Volt												
F981A225MMA	M	2.2	10	0.5	6	7.5	58	—	52	23	±30	3
F981A225MUA	U	2.2	10	0.5	15	15	32	—	28	13	±30	3
F981A475MMA	M	4.7	10	0.5	6	6	65	—	58	26	±30	3
F981A475MUALZT	U	4.7	10	4.7	25	25	24	22	—	10	±30	3
F981A106MMA	M	10	10	1.0	20	7.5	58	—	52	23	±30	3
F981A226MMALZT	M	22	10	11.0	30	8	56	50	—	22	±30	3
F981A226MSA	S	22	10	2.2	20	4	106	—	95	42	±30	3
F981A336MMALZT	M	33	10	33.0	45	8	56	50	—	22	±30	3
F981A336MSA	S	33	10	3.3	30	6	87	—	78	35	±30	3
F981A476MSA	S	47	10	9.4	35	5	95	—	85	38	±30	3
16 Volt												
F981C474MUA	U	0.47	16	0.5	6	25	24	—	22	10	±20	3
F981C105MMA	M	1	16	0.5	6	10	50	—	45	20	±30	3
F981C225MMA	M	2.2	16	0.5	6	10	50	—	45	20	±30	3
F981C475MMA	M	4.7	16	0.8	12	12	46	—	41	18	±30	3
F981C106MSA	S	10	16	1.6	18	4	106	—	95	42	±30	3
20 Volt												
F981D105MMA	M	1	20	0.5	6	10	50	—	45	20	±30	3
25 Volt												
F981E105MMA	M	1	25	0.5	8	10	50	—	45	20	±30	3
35 Volt												
F981V105MSA	S	1	35	0.7	20	8	75	—	68	30	±30	3

*2: Leakage Current

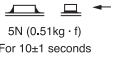
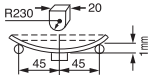
After 5 minute's application of rated voltage, leakage current at 20°C.

Moisture Sensitivity Level (MSL) is defined according to J-STD-020.

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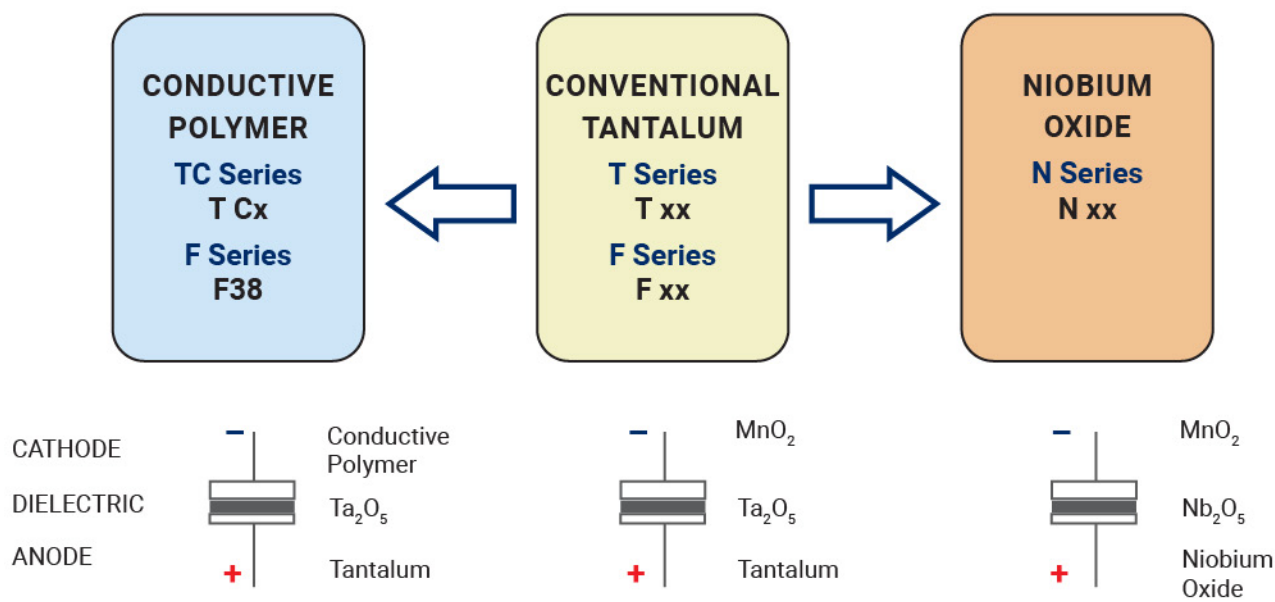
QUALIFICATION TABLE

TEST	F98 series (Temperature range -55°C to +125°C)	
	Condition	
Damp Heat (Steady State)	At 40°C, 90 to 95% R.H., 500 hours (No voltage applied) Capacitance Change Refer to the table above (*1) Dissipation Factor 150% or less of initial specified value Leakage Current 200% or less of initial specified value	
Temperature Cycles	-55°C / +125°C, 30 minutes each, 5 cycles Capacitance Change Refer to the table above (*1) Dissipation Factor 150% or less of initial specified value Leakage Current 200% or less of initial specified value	
Resistance to Soldering Heat	10 seconds reflow at 260°C, 5 seconds immersion at 260°C. Capacitance Change Refer to the table above (*1) Dissipation Factor Initial specified value or less Leakage Current Initial specified value or less	
Surge	After application of surge in series with a 1kΩ resistor at the rate of 30 seconds ON, 30 seconds OFF, for 1000 successive test cycles at 85°C, capacitors shall meet the characteristic requirements in the table above. (Not applied to LZT and AXE.) Capacitance Change Refer to the table above (*1) Dissipation Factor 150% or less of initial specified value Leakage Current 200% or less of initial specified value	
Endurance	After 1000 hours' application of rated voltage in series with a 3Ω resistor at 85°C or +60°C, capacitors shall meet the characteristic requirements in the table above. Capacitance Change Refer to the table above (*1) Dissipation Factor 150% or less of initial specified value Leakage Current 200% or less of initial specified value	
Shear Test	After applying the pressure load of 5N for 10±1 seconds horizontally to the center of capacitor side body which has no electrode and has been soldered beforehand on a substrate, there shall be found neither exfoliation nor its sign at the terminal electrode.	
Terminal Strength	Keeping a capacitor surface-mounted on a substrate upside down and supporting the substrate at both of the opposite bottom points 45mm apart from the center of capacitor, the pressure strength is applied with a specified jig at the center of substrate so that the substrate may bend by 1mm as illustrated. Then, there shall be found no remarkable abnormality on the capacitor terminals.	

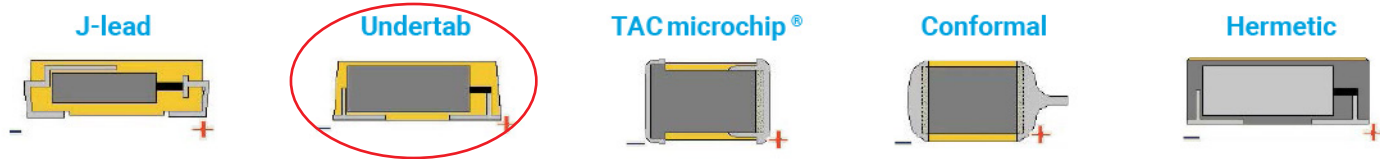
F98 Series
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AVX SOLID ELECTROLYTIC CAPACITOR ROADMAP



FIVE CAPACITOR CONSTRUCTION STYLES



SERIES LINE UP : CONVENTIONAL SMD MnO_2

