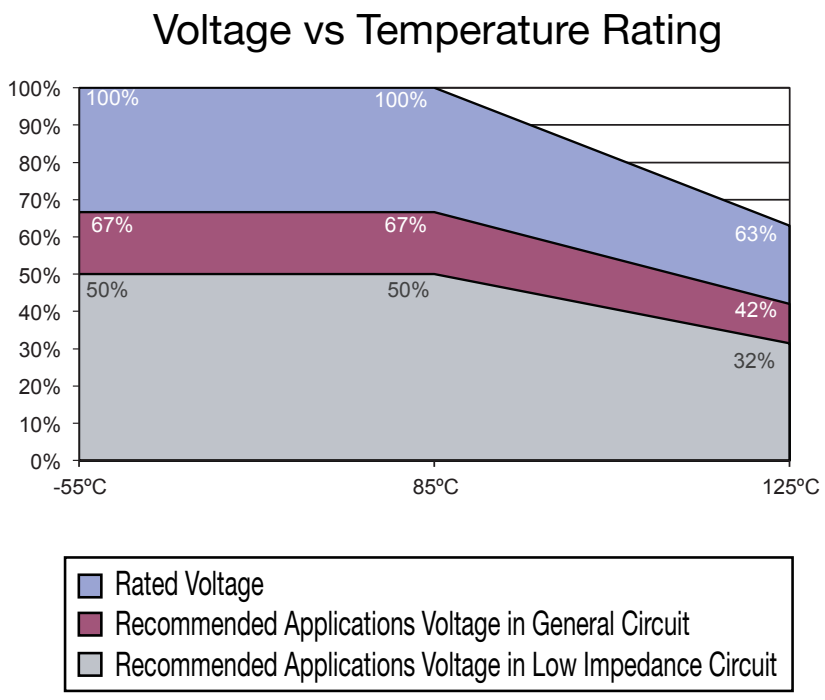
CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage					
µF	Code	6.3V (0J)	10V (1A)	16V (1C)	20V (1D)	25V (1E)	35V (1V)
0.33	334						A
0.47	474						A
0.68	684					A	A
1.0	105			A	A	A	B
1.5	155				A		B
2.2	225		A	A	A	B	B
3.3	335	A	A	A	B	B	C
4.7	475		A/B	A/B	A/B		C
6.8	685		B	B	C	C	N
10	106		A/B	A/B/C	C	C/N	N
15	156	B	B		N	N	
22	226	A/B	A/B	B/C/N	C/N	N	
33	336	A/C	B/C/N	B/C/N			
47	476	B/C	B/C/N	C/N			
68	686		N				
100	107		C				
150	157	C					

Released ratings

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	85°C	125°C		
6.3 Volt											
F970J335#AA	A	3.3	6.3	0.5	4	4.5	129	116	52	*	3
F970J156#BA	B	15	6.3	0.9	6	2.0	206	186	82	*	3
F970J226#AA	A	22	6.3	1.4	12	2.5	173	156	69	*	3
F970J226#BA	B	22	6.3	1.4	8	1.9	212	190	85	*	3
F970J336#AA	A	33	6.3	2.1	12	2.5	173	156	69	*	3
F970J336#CC	C	33	6.3	2.1	6	1.1	316	285	126	*	3
F970J476#BA	B	47	6.3	3.0	8	1.0	292	262	117	*	3
F970J476#CC	C	47	6.3	3.0	6	0.9	350	315	140	*	3
F970J157#CC	C	150	6.3	9.5	12	0.7	396	357	159	*	3
10 Volt											
F971A225#AA	A	2.2	10	0.5	4	5.0	122	110	49	*	3
F971A335#AA	A	3.3	10	0.5	4	4.5	129	116	52	*	3
F971A475#AA	A	4.7	10	0.5	6	4.0	137	123	55	*	3
F971A475#BA	B	4.7	10	0.5	6	2.8	174	157	70	*	3
F971A685#BA	B	6.8	10	0.7	6	2.5	184	166	74	*	3
F971A106#AA	A	10	10	1.0	6	3.0	158	142	63	*	3
F971A106#BA	B	10	10	1.0	6	2.0	206	186	82	*	3
F971A156#BA	B	15	10	1.5	6	2.0	206	186	82	*	3
F971A226#AA	A	22	10	2.2	15	3.0	158	142	63	*	3
F971A226#BA	B	22	10	2.2	8	1.9	212	190	85	*	3
F971A336#BA	B	33	10	3.3	8	1.9	212	190	85	*	3
F971A336#CC	C	33	10	3.3	6	1.1	316	285	126	*	3
F971A336#NC	N	33	10	3.3	6	0.7	463	417	185	*	3
F971A476#BA	B	47	10	4.7	10	1.0	292	262	117	*	3
F971A476#CC	C	47	10	4.7	8	0.9	350	315	140	*	3
F971A476#NC	N	47	10	4.7	6	0.7	463	417	185	*	3
F971A686#NC	N	68	10	6.8	6	0.6	500	450	200	*	3
F971A107#CC	C	100	10	10.0	10	0.7	396	357	159	*	3
16 Volt											
F971C105#AA	A	1	16	0.5	4	7.5	100	90	40	*	3
F971C225#AA	A	2.2	16	0.5	4	5.0	122	110	49	*	3
F971C335#AA	A	3.3	16	0.5	4	4.5	129	116	52	*	3
F971C475#AA	A	4.7	16	0.8	8	4.0	137	123	55	*	3
F971C475#BA	B	4.7	16	0.8	6	2.8	174	157	70	*	3
F971C685#BA	B	6.8	16	1.1	6	2.5	184	166	74	*	3
F971C106#AA	A	10	16	1.6	8	3.5	146	132	59	*	3
F971C106#BA	B	10	16	1.6	6	2.1	201	181	80	*	3
F971C106#CC	C	10	16	1.6	6	1.5	271	244	108	*	3
F971C226#BA	B	22	16	3.5	8	1.9	212	190	85	*	3
F971C226#CC	C	22	16	3.5	8	1.1	316	285	126	*	3
F971C226#NC	N	22	16	3.5	6	0.7	463	417	185	*	3
F971C336#BA	B	33	16	5.3	10	2.1	201	181	80	*	3
F971C336#CC	C	33	16	5.3	8	1.1	316	285	126	*	3
F971C336#NC	N	33	16	5.3	6	0.7	463	417	185	*	3
F971C476#CC	C	47	16	7.5	10	1.1	316	285	126	*	3
F971C476#NC	N	47	16	7.5	8	0.7	463	417	185	*	3
20 Volt											
F971D105#AA	A	1	20	0.5	4	7.5	100	90	40	*	3
F971D155#AA	A	1.5	20	0.5	4	6.7	106	95	42	*	3
F971D225#AA	A	2.2	20	0.5	6	6.3	109	98	44	*	3
F971D335#BA	B	3.3	20	0.7	4	3.1	166	146	66	*	3
F971D475#AA	A	4.7	20	0.9	8	4.0	137	123	55	*	3
F971D475#BA	B	4.7	20	0.9	6	2.8	174	157	70	*	3
F971D685#CC	C	6.8	20	1.4	6	1.8	247	222	99	*	3
F971D106#CC	C	10	20	2.0	6	1.5	271	244	108	*	3
F971D156#NC	N	15	20	3.0	6	0.7	463	417	185	*	3
F971D226#CC	C	22	20	4.4	8	1.1	316	285	126	*	3
F971D226#NC	N	22	20	4.4	6	0.7	463	417	185	*	3
25 Volt											
F971E684#AA	A	0.68	25	0.5	4	7.6	99	89	40	*	3
F971E105#AA	A	1	25	0.5	4	7.5	100	90	40	*	3
F971E225#BA	B	2.2	25	0.6	4	3.8	150	135	60	*	3
F971E335#BA	B	3.3	25	0.8	4	3.5	156	140	62	*	3
F971E685#CC	C	6.8	25	1.7	6	1.8	247	222	99	*	3
F971E106#NC	N	10	25	2.5	6	1.0	387	349	155	*	3
F971E156#NC	N	15	25	3.8	6	0.7	463	417	185	*	3
F971E226#NC	N	22	25	5.5	6	0.7	463	417	185	*	3

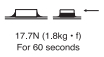
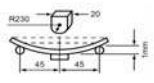
RATINGS & PART NUMBER REFERENCE

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	85°C	125°C		
35 Volt											
F971V334#AA	A	0.33	35	0.5	4	12.0	79	71	32	*	3
F971V474#AA	A	0.47	35	0.5	4	10.0	87	78	35	*	3
F971V684#AA	A	0.68	35	0.5	4	7.6	99	89	40	*	3
F971V105#BA	B	1	35	0.5	4	4.0	146	131	58	*	3
F971V155#BA	B	1.5	35	0.5	4	4.0	146	131	58	*	3
F971V225#BA	B	2.2	35	0.8	4	3.8	150	135	60	*	3
F971V335#CC	C	3.3	35	1.2	4	2.0	235	211	94	*	3
F971V475#CC	C	4.7	35	1.6	6	1.8	247	222	99	*	3
F971V685#NC	N	6.8	35	2.4	6	1.0	387	349	155	*	3
F971V106#NC	N	10	35	3.5	6	1.0	387	349	155	*	3

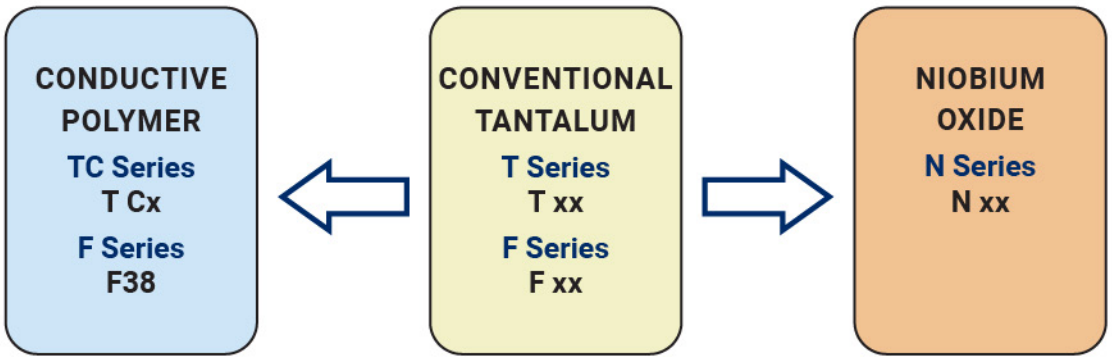
1: ΔC/C Marked ""
#: "M" for ±20% tolerance, "K" for ± 10% tolerance.
Moisture Sensitivity Level (MSL) is defined according to J-STD-020.

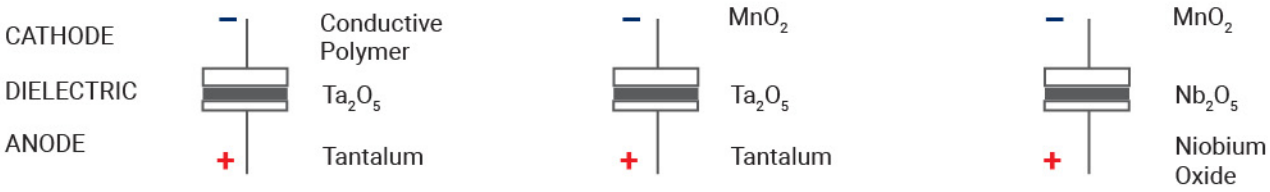
Item	All Case (%)
Damp Heat	±10
Temperature cycles	±5
Resistance soldering heat	±5
Surge	±5
Endurance	±10
Load Humidity	±10

QUALIFICATION TABLE

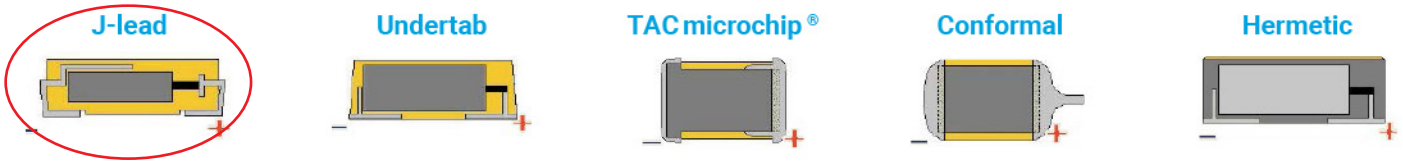
TEST	F97 series (Temperature range -55°C to +125°C) Condition
Damp Heat (Steady State)	At 85°C, 85% R.H., 1000 hours (No voltage applied) Capacitance Change ..... Refer to page 110 (*1) Dissipation Factor ..... Initial specified value or less Leakage Current ..... 125% or less than the initial specified value
Load Humidity	After 1000 hour's application of rated voltage in series with a 33Ω resistor at 85°C, 85% R.H., capacitors meet the characteristics requirements table below. Capacitance Change ..... Refer to page 110 (*1) Dissipation Factor ..... 120% or less than the initial specified value Leakage Current ..... 200% of less than the initial specified value
Temperature Cycles	At -55°C / +125°C, 30 minutes each, 1000 cycles Capacitance Change ..... Refer to page 109 (*1) Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Resistance to Soldering Heat	10 seconds reflow at 260°C, 5 seconds immersion at 260°C. Capacitance Change ..... Refer to page 110 (*1) Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Solderability	After immersing capacitors completely into a solder pot at 245°C for 2 to 3 seconds, more than 3/4 of their electrode area shall remain covered with new solder.
Surge	After application of surge voltage in series with a 33Ω 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. Capacitance Change .....Refer to page 110 (*1) Dissipation Factor .....Initial specified value or less Leakage Current .....Initial specified value or less
Endurance	After 2000 hours' application of rated voltage in series with a 3Ω resistor at 85°C, or derated voltage in series with a 3Ω resistor at 125°C, capacitors shall meet the characteristic requirements in the table above. Capacitance Change ..... Refer to page 110 (*1) Dissipation Factor ..... Initial specified value or less Leakage Current ..... Initial specified value or less
Shear Test	After applying the pressure load of 17.7N for 60 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 the substrate so that substrate may bend by1mm as illustrated. Then, there shall be found no remarkable abnormality on the capacitor terminals. 
Failure Rate	0.5% per 1000 hours at 85°C, V_R with 0.1Ω/V series impedance, 60% confidence level.

AVX SOLID ELECTROLYTIC CAPACITOR ROADMAP

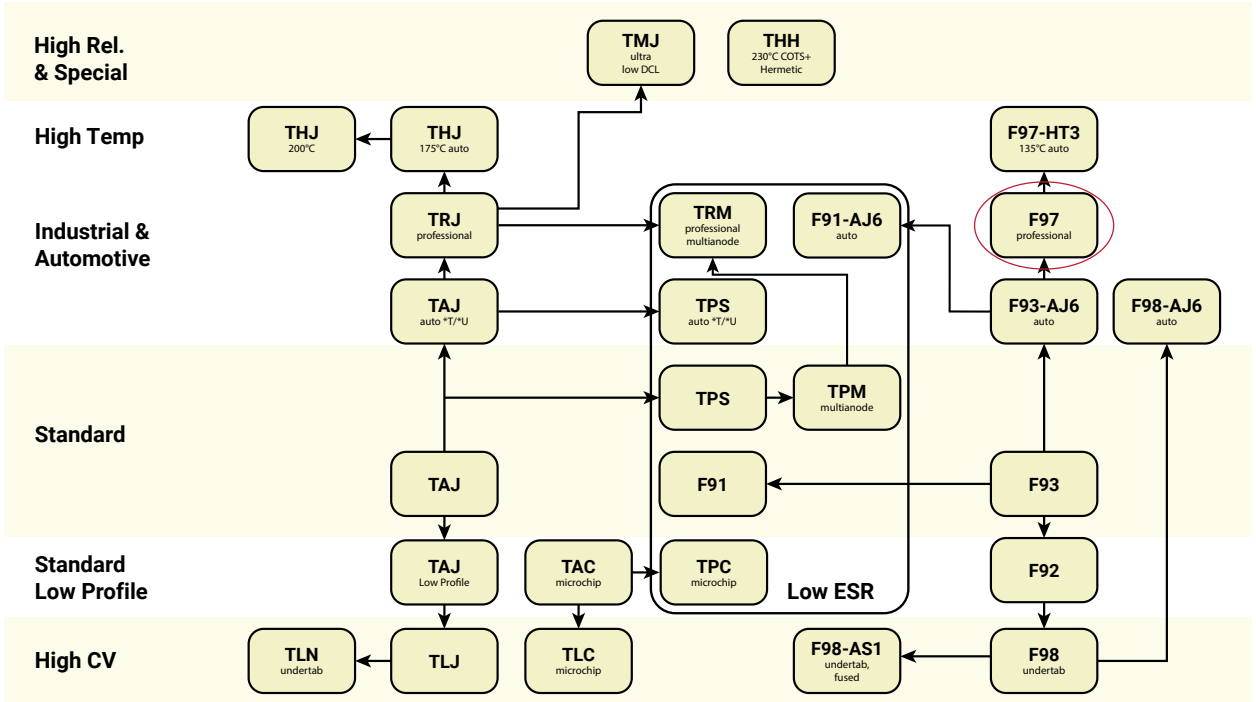




FIVE CAPACITOR CONSTRUCTION STYLES



SERIES LINE UP : CONVENTIONAL SMD MnO_2



Mouser Electronics

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Kyocera AVX:

F971C336MCC F971D475MBA F971C226KCC F971D225KAA F971E225KBA F971V684MAA F971A336KBA F971C106MBA F971V475KCC F971A226MBA F971D156MNC F971V334MAA F971A686KNC F971E335MBA F971C106MCC F971C105MAA F971C106KBA F971C475MAA F971E105MAA F971D475MAA F971A476MNC F971C226MCC F971V105MBA F971E684MAA F971A335KAA F971A336MBA F970J336MCC F971C336MBA F971D106MCC F970J226MAA F971C106MAA F971E684KAA F971V155MBA F971D335KBA F971E105KAA F970J476MBA F971C336MNC F970J336KAA F971E156MNC F971C336KCC F970J476MCC F971C335KAA F971A226MAA F971D226MCC F971A685KBA F971V225KBA F971C475MBA F971V225MBA F971A106MAA F970J476KCC F971A335MAA F970J476KBA F970J335MAA F971D155KAA F971D105KAA F971A156KBA F971E685KCC F971D226KCC F971C475KAA F970J226MBA F971A336MNC F971A336MCC F971D105MAA F971V106MNC F971E156KNC F971A106KAA F971V335MCC F971E106MNC F971A475MAA F971D106KCC F971D225MAA F971C226KBA F971A686MNC F971D226MNC F971D226KNC F971A225MAA F971A226KBA F971V474MAA F971V474KAA F971D475KAA F971C476MNC F971A476MCC F971A685MBA F971D155MAA F971A475MBA F971C685MBA F971A106MBA F971V475MCC F971E225MBA F971V155KBA F971C226MBA F971C225KAA F970J226KBA F971A475KAA F970J156KBA F971A226KAA F971A106KBA F971D335MBA F970J156MBA F971V685MNC