

F91 Series
Low ESR, Resin-Molded Chip J-Lead



FEATURES

- Compliant to the RoHS3 directive 2015/863/EU
- SMD J-Lead
- Low ESR
- 100% Surge Current Tested

APPLICATIONS

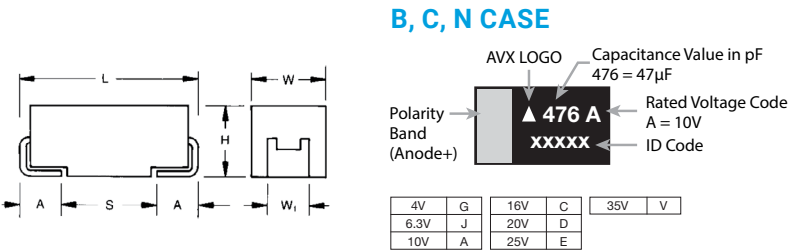
- General Medium Power DC/DC Convertors



CASE DIMENSIONS: millimeters (inches)

Table with 9 columns: Code, EIA Code, EIA Metric, L ± 0.20 (0.008), W ± 0.20 (0.008), H ± 0.20 (0.008), W1 ± 0.20 (0.008), A ± 0.30 (0.012), S Min.

W1 dimension applies to the termination width for a dimensional area only



*Capacitance code of "P" case products are as shown below.

HOW TO ORDER

Ordering code breakdown: F91 (Type), 1A (Rated Voltage), 107 (Capacitance Code), M (Tolerance), C (Case Size), [] (Packaging).

TECHNICAL SPECIFICATIONS

Table with 2 columns: Specification (Category Temperature Range, Rated Temperature, Capacitance Tolerance, Dissipation Factor, ESR 100kHz, Leakage Current, Capacitance Change By Temperature) and Value/Description.

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CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage						
μF	Code	4V (0G)	6.3V (0J)	10V (1A)	16V (1C)	20V (1D)	25V (1E)	35V (1V)
6.8	685							C
10	106						C	N
15	156					C		N
22	226				B		N	N
33	336				B/C		N	
47	476			B	N	N	N	
68	686			C				
100	107		C	C	N			
150	157	C	C	N				
220	227	C	C/N	N				
330	337	N	N	N				
470	477	N	N					
680	687	N						

Released ratings

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL (μA)	DF @ 120Hz (%)	ESR @ 100kHz (mΩ)	100kHz RMS Current (mA)			MSL
							25°C	85°C	125°C	
4 Volt										
F910G157#CC	C	150	4	6.0	12	250	663	597	265	1
F910G227#CC	C	220	4	8.8	12	250	663	597	265	1
F910G337#NC	N	330	4	13.2	10	100	1225	1102	490	1
F910G477#NC	N	470	4	18.8	16	100	1225	1102	490	1
F910G687#NC	N	680	4	27.2	18	100	1225	1102	490	1
6.3 Volt										
F910J107#CC	C	100	6.3	6.3	8	250	663	597	265	1
F910J157#CC	C	150	6.3	9.5	12	250	663	597	265	1
F910J227#CC	C	220	6.3	13.9	14	250	663	597	265	1
F910J227#NC	N	220	6.3	13.9	10	100	1225	1102	490	1
F910J337#NC	N	330	6.3	20.8	14	100	1225	1102	490	1
F910J477#NC	N	470	6.3	29.6	16	100	1225	1102	490	1
10 Volt										
F911A476#BA	B	47	10	4.7	8	500	412	371	165	1
F911A686#CC	C	68	10	6.8	8	300	606	545	242	1
F911A107#CC	C	100	10	10.0	10	250	663	597	265	1
F911A157#NC	N	150	10	15.0	10	100	1225	1102	490	1
F911A227#NC	N	220	10	22.0	12	100	1225	1102	490	3
F911A337#NC	N	330	10	33.0	18	100	1225	1102	490	3
16 Volt										
F911C226#BA	B	22	16	3.5	8	950	299	269	120	1
F911C336#BA	B	33	16	5.3	8	950	299	269	120	1
F911C336#CC	C	33	16	5.3	6	400	524	472	210	1
F911C476#NC	N	47	16	7.6	6	150	1000	900	400	1
F911C107#NC	N	100	16	16	10	100	1225	1102	490	3
20 Volt										
F911D156#CC	C	15	20	3	6	450	494	445	198	1
F911D476#NC	N	47	20	9.4	8	200	866	779	346	1
25 Volt										
F911E106#CC	C	10	25	2.5	6	450	494	445	198	1
F911E226#NC	N	22	25	5.5	6	200	866	779	346	1
F911E336#NC	N	33	25	8.3	8	200	866	779	346	1
F911E476#NC	N	47	25	11.8	8	250	775	697	310	1
35 Volt										
F911V685#CC	C	6.8	35	2.4	6	600	428	385	171	1
F911V106#NC	N	10	35	3.5	6	300	707	636	283	1
F911V156#NC	N	15	35	5.3	6	300	707	636	283	1
F911V226#NC	N	22	35	7.7	8	300	707	636	283	1

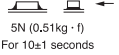
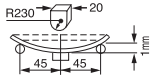
#: "M" for ±20% tolerance, "K" for ± 10% tolerance.

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

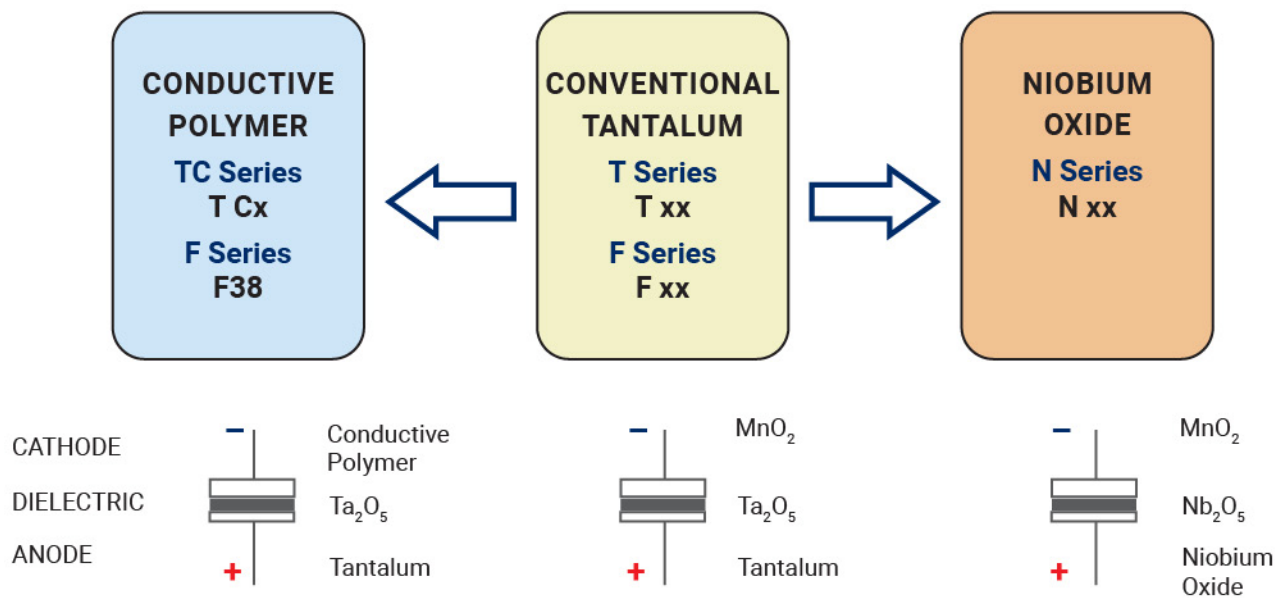
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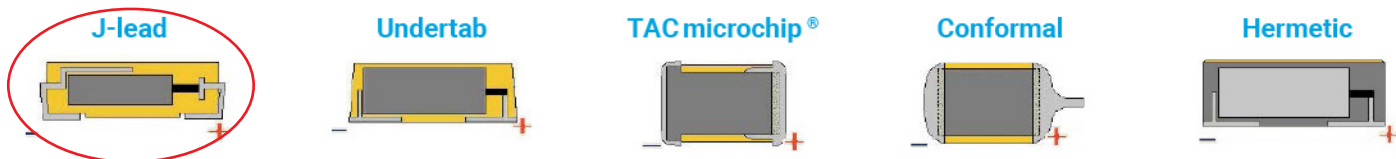
QUALIFICATION TABLE

TEST	F91 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 Within $\pm 10\%$ of the initial value Dissipation Factor Initial specified value or less Leakage Current Initial specified value or less	
Temperature Cycles	-55°C / +125°C, 30 minutes each, 5 cycles Capacitance Change Within $\pm 5\%$ of the initial value 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 Within $\pm 5\%$ of the initial value Dissipation Factor Initial specified value or less Leakage Current Initial specified value or less	
Surge	After application of surge voltage in series with a 33 Ω 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 Within $\pm 5\%$ of the initial value 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 3 Ω resistor at 85°C, or derated voltage in series with a 3 Ω resistor at 125°C, capacitors shall meet the characteristic requirements in the table above. Capacitance Change Within $\pm 10\%$ of the initial value Dissipation Factor Initial specified value or less Leakage Current Initial specified value or less	
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.	

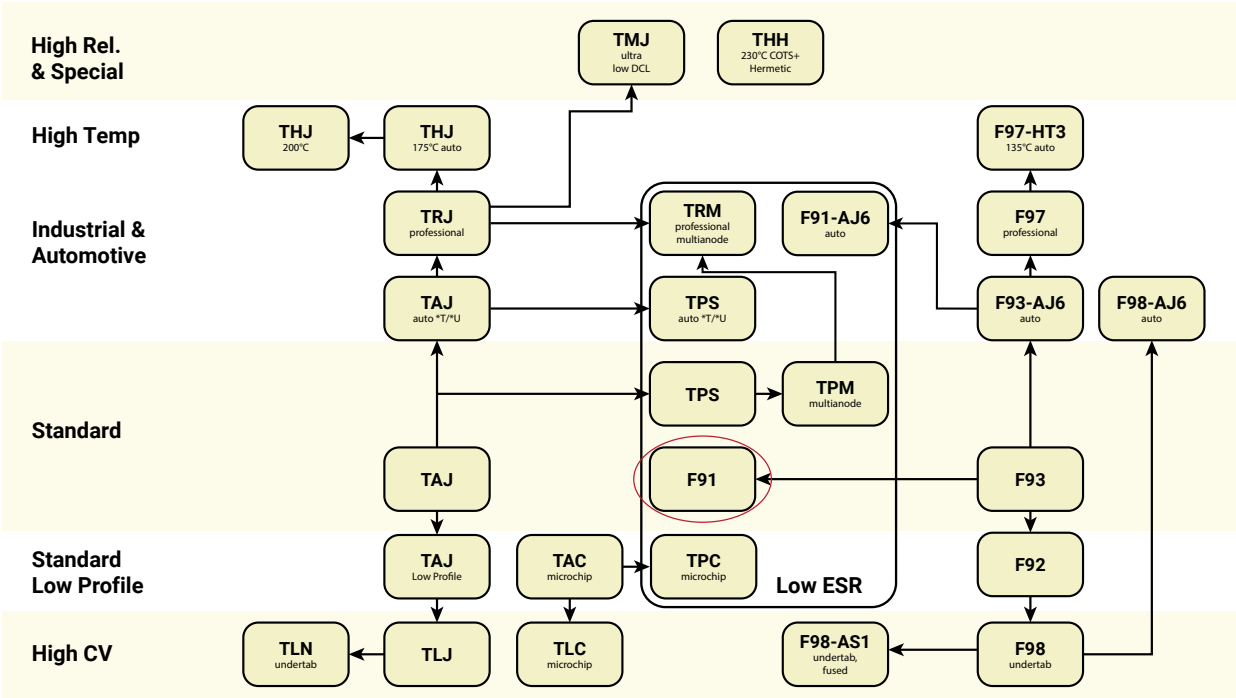
AVX SOLID ELECTROLYTIC CAPACITOR ROADMAP



FIVE CAPACITOR CONSTRUCTION STYLES



SERIES LINE UP : CONVENTIONAL SMD MnO₂



Mouser Electronics

Authorized Distributor

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