

F92 Series
Resin-Molded Chip, Low Profile J-Lead



FEATURES

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

APPLICATIONS

- Handheld Electronics
- USB Accessories

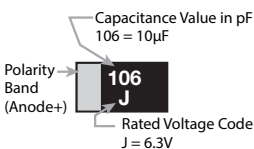
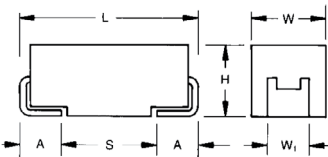


CASE DIMENSIONS: millimeters (inches)

Table with 9 columns: Code, EIA Code, EIA Metric, L ± 0.20 (0.008), W+0.20 (0.008) -0.10 (0.004), H Max., W1 ±0.20 (0.008), A+0.30 (0.012) -0.20 (0.008), S Min. Rows include P, A, and B case types.

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

MARKING
P CASE



A, B CASE

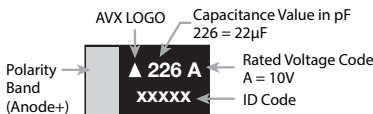


Table mapping voltage and tolerance codes: 4V, 6.3V, 10V to G, J, A; 16V, 20V, 25V to C, D, E; 35V to V.

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

HOW TO ORDER

F92 Type, 0J Rated Voltage, 106 Capacitance Code, M Tolerance, P Case Size, Packaging (See Tape & Reel Packaging Section)

TECHNICAL SPECIFICATIONS

Table with 2 columns: Specification Name, Value. Rows include Category Temperature Range, Rated Temperature, Capacitance Tolerance, Dissipation Factor, ESR 100kHz, Leakage Current, and Capacitance Change By Temperature.



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CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage							*Cap Code
μF	Code	4V (0G)	6.3V (0J)	10V (1A)	16V (1C)	20V (1D)	25V (1E)	35V (1V)	Code
0.22	224							A	J
0.33	334							A	N
0.47	474				P	A/P		A	S
0.68	684				P	A			W
1.0	105			P	P	A/P	P	A	A
1.5	155			P		A			E
2.2	225		P	P	A/P		A/B	B	J
3.3	335	P	P	A/P	A				N
4.7	475	P	P	A/P	A/B		B		S
6.8	685	P	P	P	B				w
10	106	P	A/P	A/P ^(M)	B				a
15	156	P	P ^(M)	A					e
22	226	A	A/P ^(M)	B					J
33	336		B						n
47	476	B	B						s
68	686								w
100	107	A ^(M) /B							A

Released ratings ^(M tolerance only)

**Rated temperature 60°C only. 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		
4 Volt												
F920G335#PA	P	3.3	4	0.5	8	12.0	50	—	45	20	*	1
F920G475#PA	P	4.7	4	0.5	8	6.0	71	—	64	28	*	1
F920G685#PA	P	6.8	4	0.5	10	6.0	71	—	64	28	*	1
F920G106#PA	P	10	4	0.5	10	6.0	71	—	64	28	*	1
F920G156#PA	P	15	4	0.6	10	5.0	77	—	70	31	*	1
F920G226#AA	A	22	4	0.9	12	2.8	146	—	132	59	*	1
F920G476#BA	B	47	4	1.9	12	1.7	210	—	189	84	*	1
F920G107MAA	A	100	4	4.0	30	2.8	146	—	132	59	±15	1
F920G107#BA	B	100	4	4.0	18	1.3	240	—	216	96	*	1
6.3 Volt												
F920J225#PA	P	2.2	6.3	0.5	8	12.0	50	—	45	20	*	1
F920J335#PA	P	3.3	6.3	0.5	8	12.0	50	—	45	20	*	1
F920J475#PA	P	4.7	6.3	0.5	8	6.0	71	—	64	28	*	1
F920J685#PA	P	6.8	6.3	0.5	10	6.0	71	—	64	28	*	1
F920J106#AA	A	10	6.3	0.6	8	4.0	122	—	110	49	*	1
F920J106#PA	P	10	6.3	0.6	10	6.0	71	—	64	28	*	1
F920J156MPA	P	15	6.3	0.9	10	6.0	71	—	64	28	*	1
F920J226#AA	A	22	6.3	1.4	12	2.8	146	—	132	59	*	1
F920J226MPA	P	22	6.3	1.4	20	5.0	77	—	70	31	*	1
F920J336#BA	B	33	6.3	2.1	12	1.7	210	—	189	84	*	1
F920J476#BA	B	47	6.3	3.0	12	1.7	210	—	189	84	*	3
10 Volt												
F921A105#PA	P	1	10	0.5	8	12.0	50	—	45	20	*	1
F921A155#PA	P	1.5	10	0.5	8	12.0	50	—	45	20	*	1
F921A225#PA	P	2.2	10	0.5	8	12.0	50	—	45	20	*	1
F921A335#AA	A	3.3	10	0.5	6	7.0	93	—	83	37	*	1
F921A335#PA	P	3.3	10	0.5	8	12.0	50	—	45	20	*	1
F921A475#AA	A	4.7	10	0.5	6	4.0	122	—	110	49	*	1
F921A475#PA	P	4.7	10	0.5	8	6.0	71	—	64	28	*	1
F921A685#PA	P	6.8	10	0.7	8	6.0	71	—	64	28	*	1
F921A106#AA	A	10	10	1.0	8	4.0	122	—	110	49	*	1
F921A106MPA	P	10	10	1.0	14	6.0	71	—	64	28	*	1
F921A156#AA	A	15	10	1.5	8	4.0	122	—	110	49	*	1
F921A226#BA	B	22	10	2.2	8	1.9	199	—	179	79	*	3
16 Volt												
F921C474#PA	P	0.47	16	0.5	8	20.0	39	—	35	15	*	1

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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		
F921C684#PA	P	0.68	16	0.5	8	12.0	50	—	45	20	*	1
F921C105#PA	P	1	16	0.5	8	12.0	50	—	45	20	*	1
F921C225#AA	A	2.2	16	0.5	6	7.0	93	—	83	37	*	1
F921C225#PA	P	2.2	16	0.5	8	12.0	50	—	45	20	*	1
F921C335#AA	A	3.3	16	0.5	6	7.0	93	—	83	37	*	1
F921C475#AA	A	4.7	16	0.8	6	7.0	93	—	83	37	*	1
F921C475#BA	B	4.7	16	0.8	6	3.0	158	—	142	63	*	1
F921C685#BA	B	6.8	16	1.1	6	3.0	158	—	142	63	*	1
F921C106#BA	B	10	16	1.6	6	2.0	194	—	174	77	*	1
20 Volt												
F921D474#AA	A	0.47	20	0.5	4	10.0	77	—	70	31	*	1
F921D474#PA	P	0.47	20	0.5	8	20.0	39	—	35	15	*	1
F921D684#AA	A	0.68	20	0.5	4	10.0	77	—	70	31	*	1
F921D105#AA	A	1	20	0.5	4	10.0	77	—	70	31	*	1
F921D105#PA	P	1	20	0.5	8	20.0	39	—	35	15	*	1
F921D155#AA	A	1.5	20	0.5	6	7.4	90	—	81	36	*	1
25 Volt												
F921E105#PA	P	1	25	0.5	8	20.0	39	—	35	15	*	1
F921E225#AA	A	2.2	25	0.6	8	10.0	77	—	70	31	±15	1
F921E225#BA	B	2.2	25	0.6	6	4.0	137	—	123	55	*	1
F921E475#BA	B	4.7	25	1.2	6	3.0	158	—	142	63	*	1
35 Volt												
F921V224#AA	A	0.22	35	0.5	4	10.0	77	—	70	31	*	1
F921V334#AA	A	0.33	35	0.5	4	10.0	77	—	70	31	*	1
F921V474#AA	A	0.47	35	0.5	4	10.0	77	—	70	31	*	1
F921V105#AA	A	1	35	0.5	6	10.0	77	—	70	31	*	1
F921V225#BA	B	2.2	35	0.8	6	4.0	137	—	123	55	±10	1

1: ΔC/C Marked “”

Item	P Case (%)	A, B Case (%)
Damp Heat	±20	±10
Temperature cycles	±10	±5
Resistance soldering heat	±10	±5
Surge	±10	±5
Endurance	±10	±10

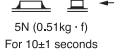
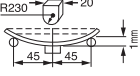
#: “M” for ±20% tolerance, “K” for ± 10% tolerance. When you need K tolerance for the part numbers which have M tolerance only, please contact to your local AVX sales office.

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

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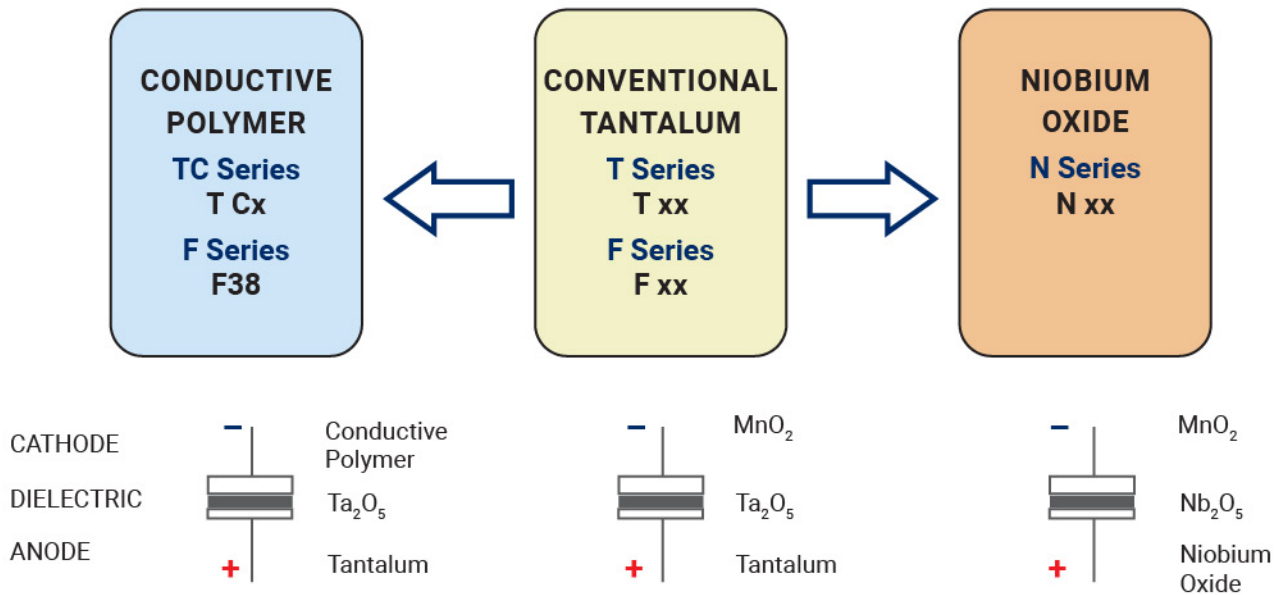
QUALIFICATION TABLE

TEST	F92 series (Temperature range -55°C to +125°C)	
	Condition	
Damp Heat (Steady State)	P Case	A, B Case
	At 40°C, 90 to 95% R.H., 500 hours (No voltage applied)	
	Capacitance Change Refer to the table above (*1)	Refer to the table above (*1)
	Dissipation Factor 150% or less than the initial specified value	Initial specified value or less
Temperature Cycles	Leakage Current Initial specified value or less	Initial specified value or less
	-55°C / +125°C, 30 minutes each, 5 cycles	
	Capacitance Change Refer to the table above (*1)	Refer to the table above (*1)
	Dissipation Factor 150% or less than the initial specified value	Initial specified value or less
Resistance to Soldering Heat	Leakage Current Initial specified value or less	Initial specified value or less
	10 seconds reflow at 260°C, 5 seconds immersion at 260°C.	
	Capacitance Change Refer to the table above (*1)	Refer to the table above (*1)
	Dissipation Factor 150% or less than the initial specified value	Initial specified value or less
Surge	Leakage Current Initial specified value or less	Initial specified value or less
	After application of surge voltage in series with a 33Ω (For "P" case: 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.	
	Capacitance Change Refer to the table above (*1)	Refer to the table above (*1)
	Dissipation Factor 150% or less than the initial specified value	Initial specified value or less
Endurance	Leakage Current Initial specified value or less	Initial specified value or less
	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 the table above (*1)	Refer to the table above (*1)
	Dissipation Factor 150% or less than the initial specified value	Initial specified value or less
Shear Test	Leakage Current Initial specified value or less	Initial specified value or less
	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.	

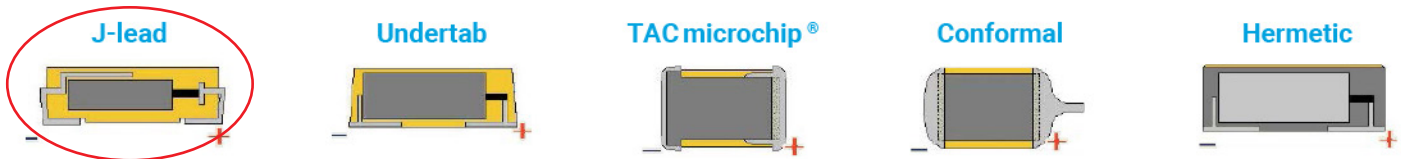
F92 Series

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AVX SOLID ELECTROLYTIC CAPACITOR ROADMAP



FIVE CAPACITOR CONSTRUCTION STYLES



SERIES LINE UP: CONVENTIONAL SMD MnO₂

