

F72/F75 Series

Low Profile and High CV Conformal Coated Chip

CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

F72

Capacitance		Rated Voltage			
µF	Code	4V (0G)	6.3V (0J)	10V (1A)	16V (1C)
33	336				R
47	476			R	R
68	686		R	R	R
100	107	R	R	R	
150	157	R	R	R	
220	227	R	R	R	M
330	337	R	R		M
470	477			M	
680	687			M	
1000	108		M/M(AH1)	M	
1500	158		M		

Released ratings

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

RATINGS & PART NUMBER REFERENCE

F72

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA)	DF @ 120Hz (%)	ESR @ 100kHz (Ω)	100kHz RMS Current (mA) 20°C	*1 ΔC/C (%)	MSL
4 Volt									
F720G107#RC	R	100	4	4.0	8	0.70	463	*	3
F720G157#RC	R	150	4	6.0	10	0.70	463	*	3
F720G227#RC	R	220	4	8.8	12	0.70	463	*	3
F720G337#RC	R	330	4	13.2	12	0.70	463	*	3
6.3 Volt									
F720J686#RC	R	68	6.3	4.3	6	0.75	447	*	3
F720J107#RC	R	100	6.3	6.3	8	0.70	463	*	3
F720J157#RC	R	150	6.3	9.5	10	0.70	463	*	3
F720J227#RC	R	220	6.3	13.9	12	0.70	463	*	3
F720J337#RC	R	330	6.3	20.8	12	0.70	463	*	3
F720J108#MCAQ2	M	1000	6.3	63.0	30	0.14	1118	±15	3
F720J108#MCAH1Q2	M	1000	6.3	63.0	30	0.075	1528	±15	3
F720J158#MCAQ2	M	1500	6.3	95.0	45	0.14	1118	±20	3
10 Volt									
F721A476#RC	R	47	10	4.7	6	0.80	433	*	3
F721A686#RC	R	68	10	6.8	6	0.75	447	*	3
F721A107#RC	R	100	10	10.0	8	0.70	463	*	3
F721A157#RC	R	150	10	15.0	10	0.70	463	*	3
F721A227#RC	R	220	10	22.0	12	0.70	463	*	3
F721A477#MCAQ2	M	470	10	47.0	30	0.14	1118	±15	3
F721A687#MCAQ2	M	680	10	68.0	35	0.14	1118	±20	3
F721A108#MCAQ2	M	1000	10	200	45	0.14	1118	±20	3
16 Volt									
F721C336#RC	R	33	16	5.3	6	0.90	408	*	3
F721C476#RC	R	47	16	7.5	6	0.80	433	*	3
F721C686#RC	R	68	16	10.9	6	0.75	447	*	3
F721C227#MCAQ2	M	220	16	35.2	12	0.20	935	±20	3
F721C337#MCAQ2	M	330	16	52.8	45	0.20	935	±20	3

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

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

*1: ΔC/C Marked "★"

Item	F72/F75 All Case (%)
Damp Heat	±10
Temperature cycles	±5
Resistance soldering heat	±5
Surge	±5
Endurance	±10

F75

Capacitance		Rated Voltage			
µF	Code	4V (0G)	6.3V (0J)	10V (1A)	16V (1C)
68	686				C
100	107				C
150	157			C	D
220	227		C	C/D	R
330	337	C	C/D	D	
470	477	C/D	D/U	R/U	
680	687	D	D/R		
1000	108	D/R	R/U		
1500	158	R			
2200	228	R	M		

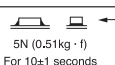
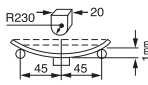
F75

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA)	DF @ 120Hz (%)	ESR @ 100kHz (Ω)	100kHz RMS Current (mA) 20°C	*1 ΔC/C (%)	MSL
4 Volt									
F750G337#CC	C	330	4	13.2	10	0.15	856	*	3
F750G477#CC	C	470	4	18.8	14	0.12	957	*	3
F750G477#DC	D	470	4	18.8	14	0.12	1118	*	3
F750G687#DC	D	680	4	27.2	18	0.12	1118	*	3
F750G108#DC	D	1000	4	40.0	24	0.12	1118	*	3
F750G108#RC	R	1000	4	40.0	24	0.12	1443	*	3
F750G158#RC	R	1500	4	60.0	30	0.12	1443	*	3
F750G228#RC	R	2200	4	88.0	45	0.07	1890	*	3
6.3 Volt									
F750J227#CC	C	220	6.3	13.9	10	0.20	742	*	3
F750J337#CC	C	330	6.3	20.8	10	0.15	856	*	3
F750J337#DC	D	330	6.3	20.8	10	0.15	1000	*	3
F750J477#DC	D	470	6.3	29.6	14	0.12	1118	*	3
F750J477#UC	U	470	6.3	29.6	15	0.10	1049	*	3
F750J687#DC	D	680	6.3	42.8	18	0.12	1118	*	3
F750J687#RC	R	680	6.3	42.8	18	0.12	1443	*	3
F750J108#RC	R	1000	6.3	63.0	24	0.12	1443	*	3
F750J108#UCAQ2	U	1000	6.3	126	40	0.15	856	±20	3
F750J228#MCAQ2	M	2200	6.3	139	60	0.08	1581	±20	3
10 Volt									
F751A157#CC	C	150	10	15.0	10	0.22	707	*	3
F751A227#CC	C	220	10	22.0	10	0.20	742	*	3
F751A227#DC	D	220	10	22.0	10	0.20	866	*	3
F751A337#DC	D	330	10	33.0	10	0.15	1000	*	3
F751A477#RC	R	470	10	47.0	14	0.12	1443	*	3
F751A477#UCAQ2	U	470	10	94.0	30	0.15	856	±20	3
16 Volt									
F751C686#CC	C	68	16	10.9	10	0.22	707	*	3
F751C107#CC	C	100	16	16.0	10	0.22	707	*	3
F751C157#DC	D	150	16	24.0	10	0.22	826	*	3
F751C227#RC	R	220	16	35.2	10	0.20	1118	*	3

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

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

QUALIFICATION TABLE

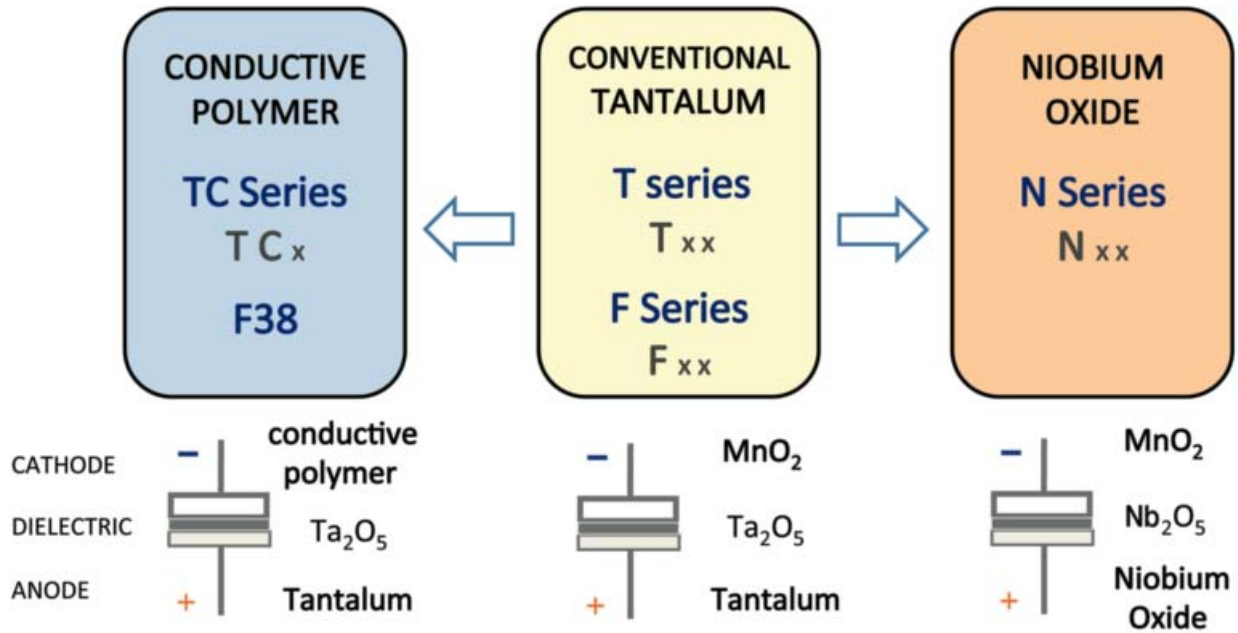
TEST	F72/F75 series (Temperature range -55°C to +125°C)	
	Condition	
Damp Heat (Steady State)	At 40°C, 90 to 95% R.H., 500 hours (No voltage applied) Capacitance Change Refer to page 173 (*1) Dissipation Factor Initial specified value or less Leakage Current Initial specified value or less	
Temperature Cycles	At -55°C / +125°C, 30 minutes each, 5 cycles Capacitance Change Refer to page 173 (*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, 10 seconds immersion at 260°C. Capacitance Change Refer to page 173 (*1) Dissipation Factor Initial specified value or less Leakage Current Initial specified value or less	
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 173 (*1) Dissipation Factor Initial specified value or less Leakage Current Initial specified value or less	
Endurance	After 2000 hours' application of rated voltage at 85°C, capacitors shall meet the characteristic requirements in the table above. Capacitance Change Refer to page 173 (*1) 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.	

F72/F75 Series

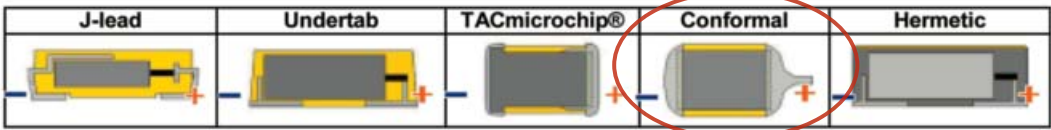


Low Profile and High CV Conformal Coated Chip

AVX SOLID ELECTROLYTIC CAPACITOR ROADMAP



Five Capacitor Construction Styles



SERIES LINE UP: CONFORMAL Ta MnO_2

