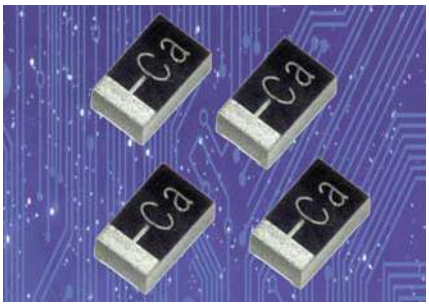
F98-AS1 Series

Fused Face-Down, High CV



FEATURES

- Compliant to the RoHS3 directive 2015/863/EU
- SMD Face Down Design
- Small and Low Profile
- 100% Surge Current Tested

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

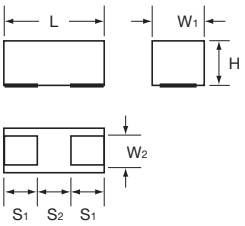
RoHS COMPLIANT

APPLICATIONS

- Smartphone
- Mobile Phone
- Wireless Module
- Hearing Aid

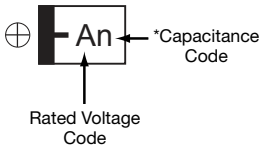
CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	L	W_1	W_2	H	S_1	S_2
S	0805	2012-09	2.00 $^{+0.20}_{-0.10}$ (0.079 $^{+0.008}_{-0.004}$)	1.25 $^{+0.20}_{-0.10}$ (0.049 $^{+0.008}_{-0.004}$)	0.90±0.10 (0.035±0.004)	0.80±0.10 (0.031±0.004)	0.50±0.10 (0.020±0.004)	1.00±0.10 (0.039±0.004)



MARKING

S CASE



HOW TO ORDER

F98	1A	336	M	S	□	AS1
Type	Rated Voltage	Capacitance Code pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)	Tolerance M = ±20%	Case Size See table above	Packaging	Fuse Series Code

Reel Dia (ϕ180)	Tape Width (mm)
A	8

TECHNICAL SPECIFICATIONS

Category Temperature Range:	-55 to +125°C
Rated Temperature:	+85°C
Capacitance Tolerance:	±20% at 120Hz
Dissipation Factor:	Refer to next page
ESR 100kHz:	Refer to next page
Leakage Current:	Refer to next page Provided that: After 5 minute's application of rated voltage, leakage current at 85°C 10 times or less than 20°C specified value.
	After 5 minute's application of rated voltage, leakage current at 125°C 12.5 times or less than 20°C specified value.
Termination Finish:	Gold Plating (standard)

F98-AS1 Series

Fused Face-Down, High CV

CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage					*Cap Code
µF	Code	10V (1A)	16V (1C)	20V (1D)	25V (1E)	35 (1V)	
1.0	105					S	A
2.2	225						J
4.7	475						S
10	106		S				a
22	226	S					J
33	336	S					n
47	476	S					s

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

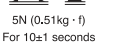
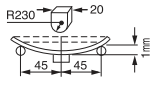
RATINGS & PART NUMBER REFERENCE

Part Number	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		
10 Volt											
F981A226MSAAS1	S	22	10	2.2	20	4.5	100	90	40	±20	3
F981A336MSAAS1	S	33	10	3.3	30	6.5	83	75	33	±30	3
F981A476MSAAS1	S	47	10	9.4	35	5.5	90	81	36	±30	3
16 Volt											
F981C106MSAAS1	S	10	16	1.6	18	4.5	100	90	40	±20	3
35 Volt											
F981V105MSAAS1	S	1	35	0.7	20	8.5	73	65	29	±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.

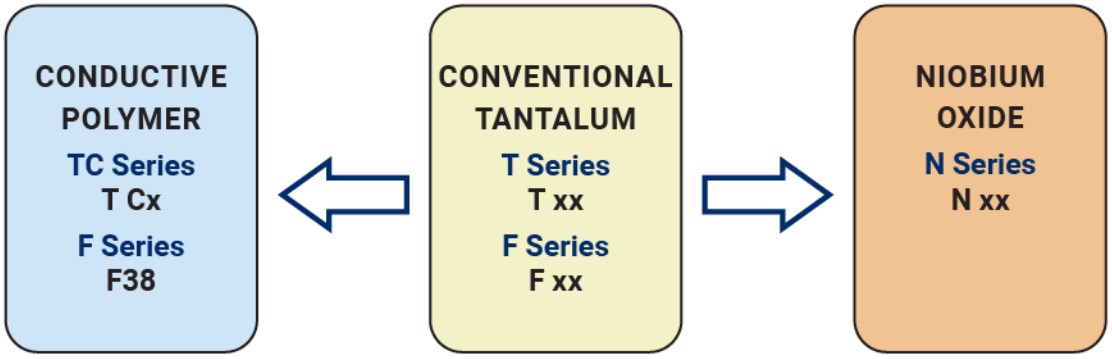
QUALIFICATION TABLE

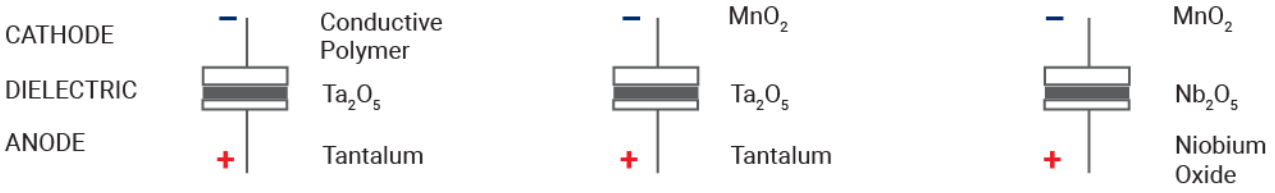
TEST	F98-AS1 series (Temperature range -55°C to +125°C)
	Condition
Damp Heat (Steady State)	At 40°C, 90 to 95% R.H., 500 hours (No voltage applied) Capacitance Change ..... Refer to the table above (*1) Dissipation Factor ..... 150% or less of initial specified value Leakage Current ..... 200% or less 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. Capacitance Change ..... Refer 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, 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 bodywhich has no electrode and has been soldered beforehand on a substrate, there shall be found neither exfoliation nor its sign at the terminal electrode.  5N (0.51kg · f) For 10±1 seconds
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. 
Fuse Activation	5 seconds max. with 2A min. applied current

F98-AS1 Series

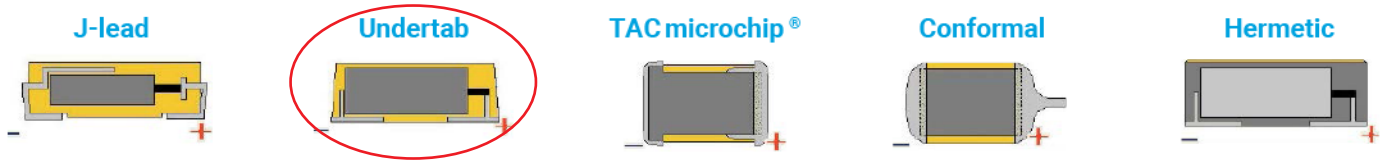
Fused Face-Down, High CV

SOLID ELECTROLYTIC CAPACITOR ROADMAP





FIVE CAPACITOR CONSTRUCTION STYLES



SERIES LINE UP: CONVENTIONAL SMD MnO_2