1. Scope

This Specification covers "FZ Series" Extra Low Impedance V-chip aluminum electrolytic capacitors.

2. Reference Standard

Japanese industrial Standard JIS C-5141 characteristics W and JIS C-5102 except as specified in this specification.

3. Environmental Protection Standard

Comply with the EU directive 2002/95/EC

4. Operating Temperature Range

-55°C ~ +105°C

5. Voltage Range

6.3 ~ 100V

6. Capacitance Range

3.3 ~ 4700μF

7. Capacitance Tolerance

±20% at 120Hz, 20°C

8. Leakage Current

1 ≤ 0.01 CV or 3 (μA) whichever is greater (after 2 minutes)

9. Tan δ

Measurement frequency: 120Hz, Temperature: 20°C

Rated Voltage (V)		6.3	10	16	25	35	50	63~80	100
Tan δ (max.)	φ4~φ10	0.26	0.19	0.16	0.14	0.12	0.10	0.08	0.07
	φ12.5~φ16	0.26	019	0.18	0.16	0.14	0.10	0.08	0.07

10. Stability at Low Temperature

Measurement frequency: 120Hz

Rated Voltage (V)		6.3~16	25~100
Impedance Ratio ZT/Z20 (max.)	Z-25°C /Z+20°C	2	2
	Z-40°C /Z+20°C	3	3
	Z-55°C /Z+20°C	4	3

11. Load Life

After 5000 hours (2000 hours for φ4~φ6.3x5.4 & φ8x6.3)application of rated voltage at 105°C, capacitors meet the characteristics requirements listed.

Capacitance Change	Within ±30% of initial value
Tan δ	200% or less of initial specified value
Leakage Current	Initial specified value or less

12. Self Life

After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for load life characteristics listed above.

13. Resistance to Soldering Heat

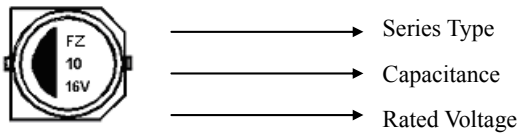
After reflow soldering according to Reflow Soldering Condition (see page 5) and restored at room temperature, they meet the characteristics listed.

Capacitance Change	Within ±10% of initial value
Tan δ	Initial specified value or less
Leakage Current	Initial specified value or less

14. Marking

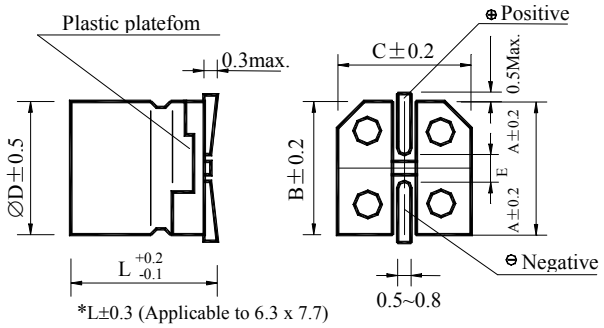
Capacitors shall be legibly marked with the following:

1) Manufacture's mark
2) Rated voltage and nominal capacitance *(6.3 voltage shall be marked with 6 voltage)*
3) Negative polarity
4) Marking: Black



15. Drawing (Unit: mm)

(φ 4~ φ 6.3)



(φ 8~ φ 10)