ALUMINUM ELECTROLYTIC CAPACITORS

Suntan®

CHIP TYPE SERIES

TS13C3

FEATURES

- Bi-polar with wide temperature range -55℃ to +105℃.
- Lead-free reflow soldering is available subject to customers' request.

Non-Polarized with Wide Temperature Series

◆ Specifications

ITEMS	PERFORMANCE CHARACTERISTICS
Operating Temperature Range	-55℃ ~ +105℃
Voltage Range	6.3~50V
Capacitance Range	0.1~47 μF
Capacitance Tolerance	±20% at 120Hz, 20℃
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.05CV or 10 μA, whichever is greater.
Tan δ	Measurement frequency : 120Hz, Temperature : 20℃

Rated voltage (V)	6.3	10	16	25	35	50
Tan δ (MAX)	0.24	0.20	0.17	0.17	0.15	0.15

Stability at Low Temperature — Measurement frequency : 120Hz

Rated voltage (V)		6.3	10	16	25	35	50
Impedance ratio	Z-25℃ / Z+20℃	4	3	2	2	2	2
ZT / Z20 (MAX)	Z-40℃ / Z+20℃	8	6	4	4	3	3

Load Life — After 1000 hours' application of rated voltage at 105℃ with the polarity inverted every 250 hours, capacitors meet the characteristics requirements listed at right

Capacitance Change	Within ± 20% of initial value
Tan δ	200% or less of initial specified value
Leakage Current	Initial specified value or less

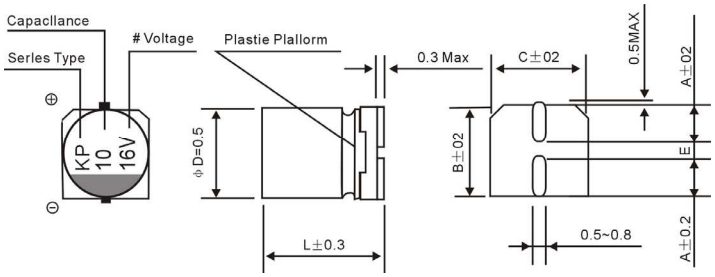
Self Life — After leaving capacitors under no load at 105℃ for 1000 hours, they meet the specified value for load life characteristics listed above.

Resistance to Soldering Heat — After reflow soldering according and restored at room temperature, they meet the characteristics requirements listed at right.

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

Applicable Standards — ELAJ RC 2366

◆ Chip type



(mm)

ØDxL	4x5.4	5x5.4	6.3x5.4
A	1.8	2.1	2.4
B	4.3	5.3	6.6
C	4.3	5.3	6.6
E	1.0	1.3	2.2
L	5.4	5.4	5.4

Voltage mark for 6.3V is [6]

Re:Date code and series type-1st digit for year;2nd digit for Quarter,4 quarter codes in one year are 1,4,7,o;3rd character for series,KP Series=P

TS13C3

◆ Case Size

WV/V / Cap/ μF		6.3		10		16		25		35		50	
		0J		1A		1C		1E		1V		1H	
0.1	0R1	--	--	--	--	--	--	--	--	--	--	4×5.4	1.0
0.22	R22	--	--	--	--	--	--	--	--	--	--	4×5.4	2.0
0.33	R33	--	--	--	--	--	--	--	--	--	--	4×5.4	2.8
0.47	R47	--	--	--	--	--	--	--	--	--	--	4×5.4	4.0
1	010	--	--	--	--	--	--	--	--	--	--	4×5.4	8.4
2.2	2R2	--	--	--	--	--	--	--	--	4×5.4	8.4	5×5.4	13
3.3	3R3	--	--	--	--	--	--	5×5.4	12	5×5.4	16	5×5.4	17
4.7	4R7	--	--	--	--	4×5.4	12	5×5.4	16	5×5.4	18	6.3×5.4	20
10	100	--	--	4×5.4	17	5×5.4	23	6.3×5.4	27	6.3×5.4	29	--	--
22	220	5×5.4	28	6.3×5.4	33	6.3×5.4	37	--	--	--	--	--	--
33	330	6.3×5.4	37	6.3×5.4	41	6.3×5.4	49	--	--	--	--	--	--
47	470	6.3×5.4	45	--	--	--	--	--	--	--	--	Case size	Allowable ripple

Allowable Ripple (mA rms) at 105℃ 120Hz

◆ Frequency coefficient of allowable ripple current

Frequency	50Hz	120Hz	300Hz	1kHz	10kHz
Coefficient	0.70	1.00	1.17	1.36	1.50

Note: Specification are subject to change without notice. For more detail and update, please visit our website.