

# AXIAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

Suntan®

NON-POLARIZED (BI-POLARIZED)

# TS13AR



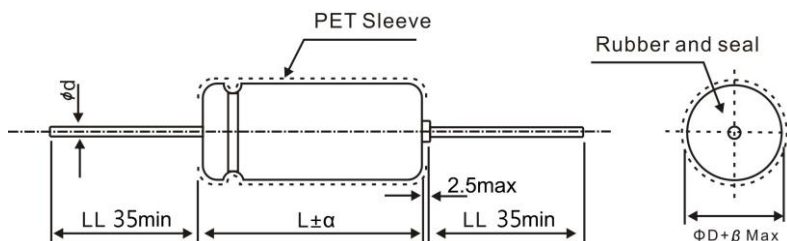
## FEATURES

- 105°C, 2,000 hours assured
- Non-polarized, suitable for crossover network of high-pitched and low-pitched sounds in high-fidelity sound systems.
- Have excellent frequency characteristics.

I T E M S C H A R A C T E R I S T I C										
Operating Temperature Range(°C)	-40°C ~ +105°C									
Capacitance Tolerance	±5% (J), ±10% (K), ±20% (M) (at 20°C, 1KHz)									
Rated Voltage	50V, 100V.DC									
Leakage Current (20°C)	$I \leq 0.04CV + 3$ (u A) (after 5 minutes applying the rated DC working Voltage at 20°C) Where: I=Leakage Current (u A) , C=rated Capacitance (µ F) , V= working Voltage (V)									
Dissipation Factor (tan δ) (at 20°C, 1KHz)	<table border="1"> <tr> <td>W.V</td> <td>50</td> <td>100</td> </tr> <tr> <td>tan δ</td> <td>0.10</td> <td>0.10</td> </tr> </table>	W.V	50	100	tan δ	0.10	0.10			
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Surge Voltage (20°C)	<table border="1"> <tr> <td>W.V</td> <td>50</td> <td>100</td> </tr> <tr> <td>S.V</td> <td>63</td> <td>125</td> </tr> </table>	W.V	50	100	S.V	63	125			
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Low Temperature Stability	Impedance ratio at 120Hz <table border="1"> <tr> <td>Rated Voltage (V)</td> <td>50</td> <td>100</td> </tr> <tr> <td>Z(-25°C) / +20°C</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z(-40°C) / +20°C</td> <td>3</td> <td>3</td> </tr> </table>	Rated Voltage (V)	50	100	Z(-25°C) / +20°C	2	2	Z(-40°C) / +20°C	3	3
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Load Life Test	After 2,000 hours application of rated voltage at 105°C, capacitors meet the characteristics requirement listed as below: <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±20% of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td>Less than 200% of specified value</td> </tr> <tr> <td>Leakage Current</td> <td>Within specified value</td> </tr> </table>	Capacitance Change	Within ±20% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Within specified value			
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Dissipation Factor	Less than 200% of specified value									
Leakage Current	Within specified value									
Shelf Life Test	After leaving capacitors under no load at 105°C for 1,000 hours and applying Voltage they meet the specified value for load life characteristics listed above.									

## DIAGRAM OF DIMENSIONS

Unit: mm



ØD	6.3	8	10	13	16	18	22	25
Ød	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8
α	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
β	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0

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**CASE SIZE & MAX RIPPLE CURRENT**

**DIMENSIONS: Diameter (ØD) x Length (L) mm**

**RIPPLE CURRENT. mA/rms at 105°C, 1KHz**

V.DC µF	50V (1H)		100V (2A)	
	ØDxL	R.C	ØDxL	R.C
1.0	8x13	50	10x17	65
1.5	8x13	61	10x17	97
2.2	8x13	75	10x17	117
2.7	8x13	82	10x17	130
3.3	8x13	91	10x17	144
3.9	8x13	99	10x17	156
4.7	8x13	109	10x17	171
5.6	8x13	119	10x17	187
6.8	10x17	160	10x21	222
8.2	10x17	175	10x21	244
10	10x17	194	10x21	269
12	10x17	212	10x21	295
15	10x17	237	13x22	398
18	10x21	280	13x22	436
22	10x21	309	13x22	482
27	10x21	343	13x22	534
33	10x21	378	13x27	633
47	10x21	452	16x28	877
56	13x22	595	16x28	957
68	13x22	656	16x28	1055
82	13x27	774	16x28	1159
100	13x27	854	16x36	1413
120	13x27	936	16x36	1548
150	16x28	1214	16x36	1731
180	16x28	1329	18x36	2031
220	16x28	1471	22x43	2577

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