

# AXIAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

Suntan®

LOW VOLTAGE, 2 RUBBER TYPE

# TS13AE

## FEATURES

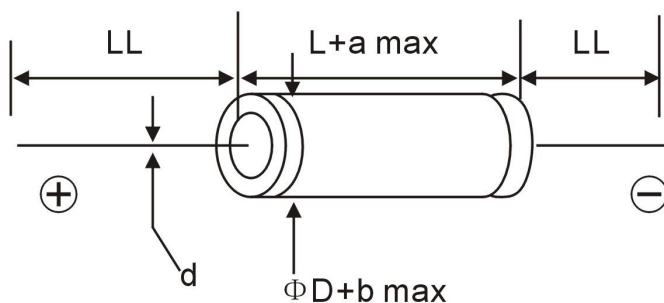
- 85°C, 2000 hours assured.
- For general purpose application



I T E M S C H A R A C T E R I S T I C																															
Operating Temperature Range	-40°C ~ +85°C																														
Voltage Range	6.3 ~ 160 WV																														
Capacitance Tolerance	±20% (at 20°C 120Hz)																														
Leakage Current(uA)(20°C)	$I \leq 0.01CV$ or 3 (µA) Whichever is greater (after 3 minutes applying the rated DC working voltage at 20°C) where: C = rated capacitance in µF. V = rated DC working voltage in V.																														
Dissipation Factor (Tan δ) (At 20°C, 120Hz)	<table border="1"> <thead> <tr> <th>WV</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> </tr> </thead> <tbody> <tr> <td>DF</td> <td>24</td> <td>20</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>10</td> <td>10</td> <td>20</td> </tr> </tbody> </table> For capacitors whose capacitance exceeds 1,000µF, the specification of tan δ is increased by 0.02 for every addition of 1,000µF.	WV	6.3	10	16	25	35	50	63	100	160	DF	24	20	16	14	12	10	10	10	20										
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Low Temperature Characteristics	Impedance ratio at 120Hz. <table border="1"> <thead> <tr> <th>Comparison Z\ WV</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> <th>160</th> </tr> </thead> <tbody> <tr> <td>-25°C / +20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> <td>2</td> <td>3</td> </tr> <tr> <td>-40°C / +20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> <td>2</td> <td>3</td> <td>3</td> <td>-</td> </tr> </tbody> </table>	Comparison Z\ WV	6.3	10	16	25	35	50	63	100	160	-25°C / +20°C	4	3	2	2	2	2	3	2	3	-40°C / +20°C	8	6	4	4	4	2	3	3	-
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Load Life	After 2000 hours application of rated voltage at 85°C, capacitors meet the characteristics requirements listed at right. <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Less than ±25% 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>Initial specified value of less</td> </tr> </tbody> </table>	Capacitance Change	Less than ±25% of initial value	Dissipation Factor	Less than 200% of specified value	Leakage Current	Initial specified value of less																								
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Shelf Life	After leaving capacitors under no load at 85°C for 500 hours and applying voltage they meet the specified value for load life characteristics listed above.																														

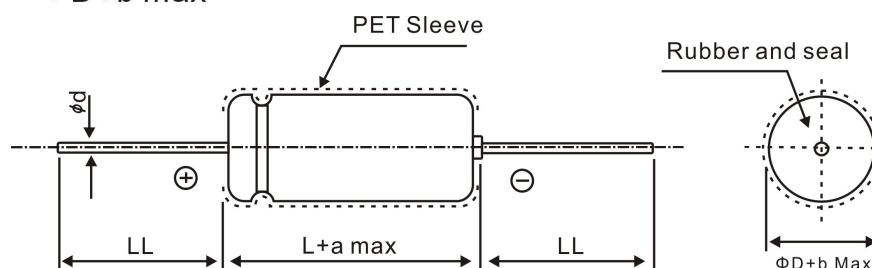
## DIAGRAM OF DIMENSIONS

Unit:mm



## LEAD DIAMETER

ØD	5	6.3	8	10	13	16	18	22	25
Ød	0.5	0.6			0.8				
a	1.0			2.0					
b	0.5			1.0					



# AXIAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

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# TS13AE

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

**RIPPLE CURRENT. mA at 85°C, 120Hz**

V.DC	25V (1E)		35V (1V)		63V (1J)		100V (2A)		160V (2C)	
	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA	ØDxL	mA
3.3	--	--	--	--	--	--	--	--	8x16	33
4.7	--	--	--	--	--	--	--	--	8x16	39
10	--	--	--	--	--	--	--	--	10x16	60
22	--	--	--	--	--	--	8x16	120	--	--
33	--	--	--	--	8x16	130	10x20	150	--	--
47	--	--	--	--	8x16	160	10x20	190	--	--
100	--	--	8x16	210	8x20	260	13x26	340	--	--
220	8x16	280	10x16	240	13x26	480	16x30	560	--	--
330	10x16	380	10x20	460	13x26	650	16x30	750	--	--
470	10x16	510	10x25	610	16x30	840	19x40	970	--	--
1000	10x25	900	13x26	1060	16x35	1330	22x40	1540	--	--
2200	16x30	1480	16x30	1580	22x42	2160	--	--	--	--
3300	16x32	1710	18x36	2050	--	--	--	--	--	--
4700	18x36	2170	--	--	--	--	--	--	--	--
6800	22x42	2580	--	--	--	--	--	--	--	--

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