Suntan

AXIAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

LOW VOLTAGE TYPE

TS13AM

FEATURES

- 85℃, 1000 hours assured.
- For general purpose application



ITEM	CHARACTERISTIC
Operating Temperature Range	-40℃ ~+85℃
Capacitance Tolerance	±10%, ±20% (at 20℃ 120Hz)
Leakage Current	I = 0.002CV or 3(μA) Whichever is greater (after 2 minutes applying the rated DC working voltage at 20℃) where: C= rated capacitance in μF. V = rated DC working voltage in V.
Dissipation Factor (Tanδ) (At 20℃, 120 Hz)	See table below. For capacitors whose capacitance exceeds 1,000μF, the specification of tanδ is increased by 0.02 for every addition of 1,000μF.
Surge Voltage	See table below.
Low Temperature Characteristics	Impedance radio at 120Hz. See table below.
Load Life	After 1000 hours application of rated voltage at 85℃, capacitors meet the characteristics requirements listed at right.
Shelf Life	After leaving capacitors under no load at 85℃ for 1000 hours and applying voltage they meet the specified value for load life characteristics listed above.
Marking	Printed with white color letter on black sleeve.
Applicable Standards	Satisfies characteristic W of JIS C5141.

Rated voltage (V)	6.3	10	16	25	35	50	63	100
Tan δ	0.23	0.20	0.17	0.15	0.12	0.10	0.09	0.08

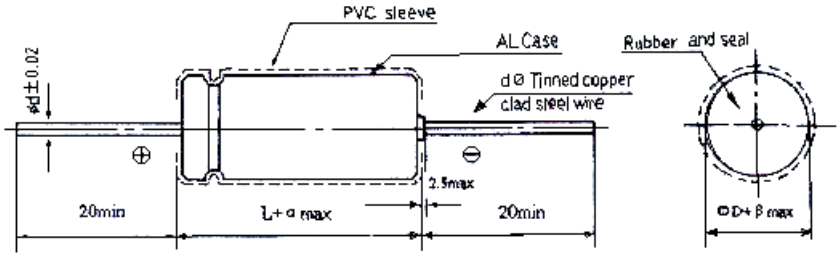
Rated voltage (V)		6.3	10	16	25	35	50	63	100
Surge voltage (V)		7.3	13	20	32	44	63	79	125

Rated voltage (V)		6.3	10	16	25	35	50	63	100
Z (-25℃) / Z (+20℃)	ΦD<16	6	4	3	3	2	2	2	2
	ΦD≥16	8	6	4	4	3	3	3	3
Z (-40℃) / Z (+20℃)	ΦD<16	10	8	6	6	4	3	3	3
	ΦD≥16	18	16	12	10	8	8	6	6

Capacitance Change	Within ±20% of initial value
Dissipation Factor	Less than 200% of specified value
Leakage Current	Initial specified value of less

DIARGAM OF DIMENSIONS

Unit: mm



LEAD DIAMETER

ΦD	5	6	6.3	8	10	13	16	18	22	25
Φ	0.6						0.8			
α	1.5				2.0					
β	0.5				1.0					

Suntan

AXIAL TYPE ALUMINUM ELECTROLYTIC CAPACITORS

L O W V O L T A G E T Y P E

TS13AM

DIMENSIONS: Diameter (DΦ)x Length(L) m/m

RIPPLE CURRENT. mA at 85℃, 120Hz

V.DC		6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)		63V (1J)		100V (2A)	
μF	**Contents**	**ΦDxL**	**mA**	**ΦDxL**	**mA**	**ΦDxL**	**mA**	**ΦDxL**	**mA**	**ΦDxL**	**mA**	**ΦDxL**	**mA**	**ΦDxL**	**mA**	**ΦDxL**	**mA**
0.10	0R1											5x12	1.5	5x12	3	5x12	3
0.22	R22											5x12	3.5	5x12	4.5	5x12	5
0.33	R33											5x12	5	5x12	7.5	5x12	8
0.47	R47											5x12	5	5x12	9	5x12	9
1.0	010											5x12	10	5x12	15	5x12	15
2.2	2R2											5x12	20	5x12	28	5x12	28
3.3	3R3											5x12	28	5x12	31	5x12	34
4.7	4R7											5x12	34	5x12	37	6x12	40
10	100							5x12	40	5x12	45	5x12	50	6x12	55	6.3x14	60
22	220					5x12	60	5x12	65	6x12	70	6x12	85	6.3x14	90	8x16	120
33	330					5x12	70	5x12	80	6.3x14	90	6.3x14	110	8x13	120	10x17	150
47	470	5x12	73	5x12	80	6x12	85	6x12	100	6.3x14	120	8x13	130	8x16	160	10x21	190
100	101	6x12	121	6x12	130	6.3x14	160	8x13	170	8x16	210	10x17	220	10x17	260	13x22	340
220	221	6.3x14	194	8x13	210	8x13	260	8x16	280	10x17	340	10x21	410	13x22	480	16x28	560
330	331	8x16	278	8x16	300	8x16	320	10x17	380	10x21	460	13x22	560	13x22	650	16x33	750
470	471	8x16	324	8x16	350	8x16	430	10x21	510	13x22	610	13x22	730	13x27	780	16x36	942
1000	102	10x17	631	10x17	640	10x21	770	13x22	873	13x27	955	16x33	1111	16x36	1249	18x42	1359
2200	222	13x22	929	13x22	1051	13x24	1125	16x28	1344	16x33	1421	18x36	1699	22x43	1744	25x52	2430
3300	332	13x27	1150	13x27	1288	16x28	1454	16x33	1611	18x36	1640	22x43	2027	25x52	2309		
4700	472	13x27	1354	16x28	1552	16x33	1650	18x36	1881	22x43	2280	25x43	2347	25x52	2710		
6800	682	16x28	1762	16x33	1930	18x36	2040	18x42	2170	22x43	2470	25x52	2650				
10000	103	16x36	2062	18x36	2122	18x42	2503	22x42	2893	25x52	3180						

*Frequency coefficient of allowable ripple current

Freq.(Hz) / Cap.(μF)	60	120	500	1K	10K up
Under 100	0.70	1.00	1.30	1.40	1.50
100 to 1000	0.75	1.00	1.20	1.30	1.35
1000 up above	0.80	1.00	1.10	1.12	1.15

*Allowable ripple current vs. ambient temperature

Temperature (℃)	Under 50	70	85
Multiplied	1.75	1.40	1.00