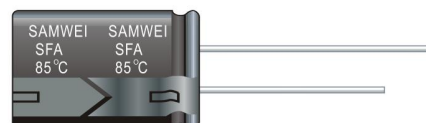


SFA SERIES(For Audio音響電容)

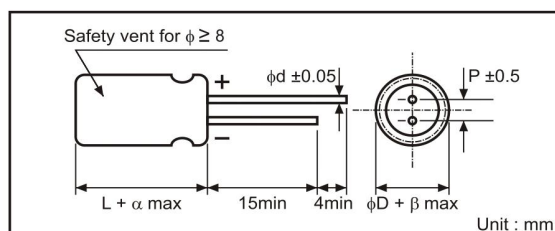
- Standard,for audio equipment.
- Low distortion ratio ensured with anti-vibration structures.



◆ SPECIFICATIONS

Item	Performance Characteristics																																			
Operating temperature range	-40 to +85℃																																			
Rated Working Voltage Range	6.3 to 100V																																			
Nominal Capacitance Range	0.1 to 10000μF																																			
Capacitance Tolerance	±20(120Hz,+20℃)																																			
Leakage Current	I≤0.005CV or 2(μA) whichever is greater after 2minutes application of rated working voltage at +20℃																																			
Dissipation Factor tan δ(120Hz,+20℃)	<table><tr><td>Working Voltage(V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td>tan δ(max)</td><td>0.22</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.09</td><td>0.08</td></tr></table>									Working Voltage(V)	6.3	10	16	25	35	50	63	100	tan δ(max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08									
Working Voltage(V)	6.3	10	16	25	35	50	63	100																												
tan δ(max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08																												
Low Temperature Characteristics	Impedance ratio max at 120Hz <table><tr><td>Working Voltage(V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td></tr><tr><td>Z-25℃/Z+20℃</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z-40℃/Z+20℃</td><td>8</td><td>6</td><td>4</td><td>4</td><td>3</td><td>3</td><td>3</td><td>3</td></tr></table>									Working Voltage(V)	6.3	10	16	25	35	50	63	100	Z-25℃/Z+20℃	4	3	2	2	2	2	2	2	Z-40℃/Z+20℃	8	6	4	4	3	3	3	3
Working Voltage(V)	6.3	10	16	25	35	50	63	100																												
Z-25℃/Z+20℃	4	3	2	2	2	2	2	2																												
Z-40℃/Z+20℃	8	6	4	4	3	3	3	3																												
High Temperature Loading	Test conditions Duration : 1000 hours Ambient temp : + 85℃ Applied voltage : Rated DC working voltage				Post test requirements at +20℃ Leakage current : ≤Initial specified value Cap.Change :within ±20%of Initial measured value tan δ : ≤ 150% of Initial specified value																															
Shelf Life	Test conditions Duration : 500 hours Ambient temp : + 85℃ Applied voltage : (None)				Post test requirements at +20℃ Leakage current : ≤Initial specified value Cap.Change :within ±20%of Initial measured value tan δ : ≤ 150% of Initial specified value																															

◆ CASE SIZE TABLE



ΦD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8
α	(L < 20)1.5 (L ≥ 20)2.0						
β	(D < 20)0.5 (D ≥ 20)1.0						

◆ RIPPLE CURRENT MULTIPLIER

(1) Frequency Coefficient

freq. (Hz) cap(μf)	50	120	300	1k	10k~
$\leq$	0.75	1.00	1.35	1.57	2.00
56~470	0.80	1.00	1.23	1.34	1.50
≥ 560	0.85	1.00	1.10	1.13	1.15

(2) Temperature Coefficient

Temperature	~55	65	70	85
FACTOR	1.65	1.50	1.30	1.00

SFA SERIES(For Audio音響電容)

◆ DIMENSIONS

Voltage	6.3V		10V		16V		25V	
Cap(μF)	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
4.7							5*11	22
10					5*11	31	5*11	32
22	5*11	36	5*11	41	5*11	46	5*11	50
33	5*11	46	5*11	51	5*11	57	6.3*11	70
47	5*11	55	5*11	60	6.3*11	74	6.3*11	85
100	6.3*11	88	6.3*11	99	8*12	128	8*12	140
220	8*12	155	8*12	170	10*12.5	226	10*16	260
330	10*12.5	226	10*12.5	247	10*16	309	10*20	351
470	10*12.5	270	10*20	330	10*20	406	12.5*20	476
1000	10*20	486	12.5*20	601	12.5*25	723	16*25	36
2200	12.5*25	867	16*25	1047	16*25	1209	16*35	36
3300	16*25	1135	16*30	1520	16*25	1720	18*35	
4700	16*30	1431	16*35	1840	18*35	2140		
6800	18*35	1810	18*40	2049				
10000	18*40	2100						

Maximum Allowable Ripple Current (mA rms) at 85℃ 120Hz

Case Size ΦD X L (mm)

Voltage	35V		50V		63V		100V	
Cap(μF)	Size	Ripple	Size	Ripple				
0.1			5*11	1.1			5*11	2.3
0.22			5*11	2.4			5*11	5.5
0.33			5*11	3.6			5*11	8.0
0.47			5*11	5.0			5*11	10
1			5*11	9.0			5*11	15
2.2			5*11	18			5*11	22
3.3			5*11	22			5*11	27
4.7	5*11	24	5*11	27			5*11	36
10	5*11	36	5*11	39	6.3*11	50	8*12	65
22	6.3*11	64	6.3*11	65	8*12	85	10*12.5	110
33	6.3*11	75	8*12	93	8*12	105	10*16	150
47	8*12	101	8*12	111	10*12.5	140	10*20	190
100	10*12.5	176	10*16	215	10*20	255	12.5*20	300
220	10*20	320	12.5*20	390	12.5*20	420	16*25	549
330	12.5*20	446	12.5*20	488	12.5*25	541	16*30	743
470	12.5*25	590	16*25	650	16*25	840	18*35	980
1000	16*25	1060	16*30	1143	18*35	1400		
2200	18*35	1840						

Maximum Allowable Ripple Current (mA rms) at 85℃ 120Hz

Case Size ΦD X L (mm)