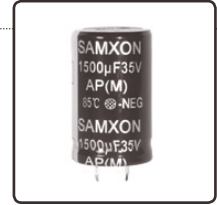


## FEATURES

- Designed for high grade audio equipment, giving priority to high fidelity sound quality.
- Suitable for use in mini-compos, CD, DAT players, cassette decks and etc.



## SPECIFICATIONS

Item	Performance Characteristics			
Operating Temperature Range	-40 to +85°C			
Rated Working Voltage Range	16 to 100V			
Nominal Capacitance Range	680 to 10000µF			
Capacitance Tolerance	±20% at 120Hz, +20°C			
Leakage Current	$I \leq 3\sqrt{CV}$ (µA) after 5 minutes application of rated working voltage at +20°C			
tan δ (120Hz, +20°C)	Working Voltage (V)	16	25~63	80~100
	tan δ (max.)	0.30	0.25	0.22
Low Temperature Characteristics	Impedance ratio max. at 120Hz			
	Working Voltage (V)	16~100		
	Z-25°C / Z+20°C	4		
High Temperature Loading	Test time	: 1,000 hours		Post test requirements at +20°C
	Test temperature	: +85°C		Leakage current : ≤Initial specified value
	Test condition	: Rated DC working voltage with rated ripple current		Cap. change : within ±20% of the initial measured value
Shelf Life	At +85°C no voltage applied after 1,000 hours and then being stabilized at +20°C the capacitors shall meet the following limits			
	Leakage current	: ≤Initial specified value		
	Cap. change	: within ±20% of the initial measured value		
Industrial Standard	JIS C - 5101-4 (IEC 60384-4)			

## RIPPLE CURRENT MULTIPLIER

### Frequency Coefficient

Coefficient	Freq. (Hz)			
	60	120	1k	10k~50k
Rated Voltage				
16~100V	0.90	1.00	1.15	1.25

## PART NUMBER SYSTEM (EXAMPLE : 16V 4700µF)

1	2 3	4 5 6	7	8 9	10	11 12	13 14
E	AP	478	M	1C	N	25	SW

Type (Terminal Code)  
 Case Length (25mm)  
 Diameter (22mm)  
 Voltage (16V)  
 Tolerance (±20%)  
 Capacitance (4700µF)  
 Series  
 E-CAP

## STANDARD RATINGS

Voltage (Code)		16V (1C)		25V (1E)		35V (1V)		63V (1J)	
Cap. (µF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
680	687							22 x 25	0.75
1000	108							22 x 30	1.00
								25 x 25	1.00
1500	158					22 x 25	1.15	22 x 35	1.30
								25 x 30	1.30
2200	228			22 x 25	1.35	22 x 30	1.50	22 x 45	1.75
								25 x 40	1.80
								30 x 30	1.75
3300	338	22 x 20	1.35	25 x 25	1.80	30 x 25	2.00	35 x 25	1.80
				22 x 30	1.80	22 x 35	1.95	25 x 50	2.45
				25 x 30	1.95	25 x 30	1.95	30 x 40	2.45
4700	478	22 x 25	1.80	25 x 25	1.80	30 x 25	2.00	35 x 30	2.40
				22 x 35	2.30	22 x 45	2.55	30 x 50	3.20
				25 x 30	2.30	25 x 40	2.65	30 x 30	2.60
				30 x 25	2.40	35 x 25	2.65	35 x 40	3.20
6800	688	22 x 35	2.25	22 x 45	2.75	25 x 50	3.10	35 x 50	3.75
				25 x 40	2.80	30 x 40	3.10		
				30 x 30	2.75	35 x 30	3.00		
				30 x 25	2.35	35 x 25	2.85		
10000	109	22 x 45	2.50	25 x 50	3.10	30 x 50	3.40		
				25 x 35	2.50	30 x 40	3.10		
				30 x 30	2.50	35 x 40	3.40		
				35 x 25	2.60	35 x 30	3.00		

Maximum Allowable Ripple Current (Arms) at 85°C 120Hz

Case Size  $\Phi$ D x L (mm)

Voltage (Code)		80V (1K)		100V (2A)	
Cap. (µF)	Code	Case Size	Ripple Current	Case Size	Ripple Current
680	687	22 x 30	0.90	22 x 35	0.95
		25 x 25	0.90	25 x 30	1.00
				30 x 25	1.00
1000	108	22 x 35	1.20	22 x 50	1.35
		25 x 30	1.20	25 x 40	1.35
				30 x 30	1.35
				35 x 25	1.35
1500	158	22 x 50	1.70	25 x 50	1.80
		25 x 40	1.65	30 x 40	1.85
				30 x 30	1.65
				35 x 25	1.65
2200	228	25 x 50	2.20	30 x 50	2.45
		30 x 40	2.20	35 x 40	2.45
				35 x 30	2.15
3300	338	30 x 50	3.00	35 x 40	2.45
		35 x 40	2.95		
4700	478	35 x 50	3.90		

Maximum Allowable Ripple Current (Arms) at 85°C 120Hz

Case Size  $\Phi$ D x L (mm)

Specifications are subject to change without notice. Should a safety or technical concern arise regarding the product, please be sure to contact our sales offices or agents immediately.