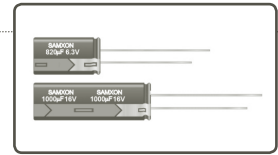


### FEATURES

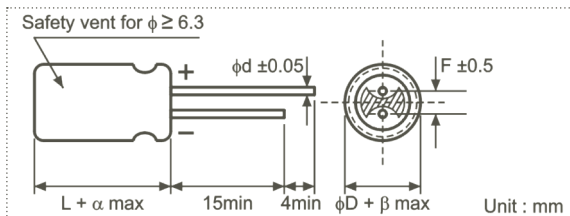
- Load life of 5,000~6,000 hours at 105°C.
- Enabled high ripple current by a reduction of impedance at high frequency range.
- Lowest impedance for personal computer and storage equipment.



### SPECIFICATIONS

Item	Performance Characteristics							
Operating Temperature Range	-40 to +105°C							
Rated Working Voltage Range	6.3 to 50V							
Nominal Capacitance Range	100 to 8200µF							
Capacitance Tolerance	±20% at 120Hz, +20°C							
Leakage Current	I ≤ 0.01CV or 3 (µA) whichever is greater measured after 2 minutes application of rated working voltage at +20°C							
tan δ (120Hz, +20°C)	Working Voltage (V)	6.3	10	16	25	35	50	
	tan δ (max.)	0.22	0.19	0.16	0.14	0.12	0.10	
For capacitance value >1000µF, add 0.02 per another 1000µF								
Low Temperature Characteristics	Impedance ratio max. at 120Hz							
	Working Voltage (V)	6.3	10	16	25	35	50	
Z-25°C / Z+20°C		2	2	2	2	2	2	
High Temperature Loading	Test time	ΦD	6.3	8~16	Post test requirements at +20°C			
		Load life	5,000h	6,000h	Leakage current : ≤ Initial specified value			
	Test temperature	: +105°C				Cap. change : within ±25% of the initial measured value (6.3, 10V: within ±30%)		
Test conditions		: Rated DC working voltage with rated ripple current				tan δ		: ≤ 200% of the initial specified value
Shelf Life	At +105°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 ±25% of the initial measured value (6.3, 10V: within ±30%)					
tan δ		: ≤ 200% of the initial specified value						
Industrial Standard	JIS C - 5101-4 (IEC 60384-4)							

### CASE SIZE TABLE



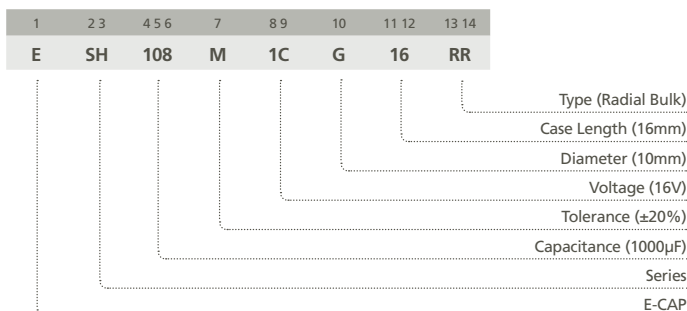
φD	6.3	8 (L < 20)	8 (L ≥ 20)	10	12.5	16
F	2.5	3.5		5.0	5.0	7.5
φd	0.5			0.6		0.8
α	(L < 20) 1.5			(L ≥ 20) 2.0		
β	(D < 20) 0.5			(D ≥ 20) 1.0		

### RIPPLE CURRENT MULTIPLIER

#### Frequency Coefficient

Coefficient	Freq. (Hz)			
	120	1k	10k	100k
Cap (µF)				
100~180	0.40	0.75	0.90	1.00
220~560	0.50	0.85	0.94	1.00
680~1800	0.60	0.87	0.95	1.00
2200~3900	0.75	0.90	0.95	1.00
4700~8200	0.85	0.95	0.98	1.00

### PART NUMBER SYSTEM (EXAMPLE : 16V 1000µF)



**STANDARD RATINGS**

Voltage (Code)		6.3V (0J)			10V (1A)			16V (1C)		
Cap. (µF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
220	227							6.3 x 11	0.110	500
330	337				6.3 x 11	0.110	500			
470	477	6.3 x 11	0.110	500				8 x 12	0.062	900
680	687				8 x 12	0.062	900	8 x 16	0.048	1210
820	827	8 x 12	0.062	900				10 x 12.5	0.045	1240
1000	108				8 x 16	0.048	1210	8 x 20	0.033	1410
					10 x 12.5	0.045	1240	10 x 16	0.032	1650
1200	128	8 x 16	0.048	1210						
		10 x 12.5	0.045	1240						
1500	158	8 x 20	0.033	1410	8 x 20	0.033	1410	10 x 20	0.020	1960
					10 x 16	0.032	1650			
1800	188	10 x 16	0.032	1650	10 x 20	0.020	1960	10 x 25	0.018	2250
2200	228	10 x 20	0.020	1960	10 x 25	0.018	2250	12.5 x 20	0.017	2480
2700	278	10 x 25	0.018	2250				12.5 x 25	0.015	2900
3300	338				12.5 x 20	0.017	2480	12.5 x 30	0.013	3450
								16 x 20	0.015	3250
3900	398	12.5 x 20	0.017	2480	12.5 x 25	0.015	2900	12.5 x 35	0.012	3570
4700	478	12.5 x 25	0.015	2900	12.5 x 30	0.013	3450	16 x 25	0.013	3630
					16 x 20	0.015	3250			
5600	568	12.5 x 30	0.013	3450	12.5 x 35	0.012	3570			
6800	688	12.5 x 35	0.012	3570	16 x 25	0.013	3630			
		16 x 20	0.015	3250						
8200	828	16 x 25	0.013	3630						

Maximum Allowable Ripple Current (mArms) at 105°C 100kHz

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

Maximum Impedance ( $\Omega$ ) at 20°C 100kHz

Voltage (Code)		25V (1E)			35V (1V)			50V (1H)		
Cap. (µF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
100	107	6.3 x 11	0.110	500	6.3 x 11	0.110	500	8 x 12	0.074	724
150	157	6.3 x 11	0.110	500				10 x 12.5	0.061	979
220	227				8 x 12	0.062	900	10 x 16	0.042	1370
330	337	8 x 12	0.062	900	10 x 12.5	0.045	1240	10 x 20	0.028	1870
390	397	8 x 16	0.048	1210	8 x 20	0.033	1410			
470	477	10 x 12.5	0.045	1240	10 x 16	0.032	1650	12.5 x 20	0.027	2050
560	567	8 x 20	0.033	1410	10 x 20	0.020	1960	12.5 x 25	0.023	2410
680	687	10 x 16	0.032	1650	10 x 20	0.020	1960	12.5 x 30	0.021	2860
820	827	10 x 20	0.020	1960						
1000	108	10 x 25	0.018	2250	12.5 x 20	0.017	2480	16 x 25	0.021	3010
1200	128				12.5 x 25	0.015	2900			
1500	158	12.5 x 20	0.017	2480						
1800	188	12.5 x 25	0.015	2900						
2200	228	12.5 x 30	0.013	3450	16 x 25	0.013	3630			
		16 x 20	0.015	3250						
2700	278	12.5 x 35	0.012	3570						
3300	338	16 x 25	0.013	3630						

Maximum Allowable Ripple Current (mArms) at 105°C 100kHz

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

Maximum Impedance ( $\Omega$ ) at 20°C 100kHz

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.