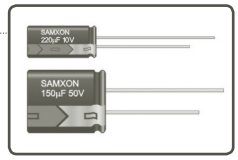
+105˚C, High Ripple Current (高紋波), Longer Life Assurance (較長壽命), Low Impedance (低阻抗品)

FEATURES



- Low impedance for high frequency.
- Long life: 4,000~10,000 hours at 105˚C.

SPECIFICATIONS

Item	Performance Characteristics
Operating Temperature Range	-40 to +105˚C
Rated Working Voltage Range	6.3 to 100V
Nominal Capacitance Range	15 to 3900μF
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)	For capacitance value >1000μF, add 0.02 per another 1000μF
Low Temperature Characteristics	Impedance ratio max. at 120Hz
High Temperature Loading	Post test requirements at +20˚C Leakage current : ≤Initial specified value Cap. change : within ±25% of the initial measured value 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 tan δ : ≤200% of the initial specified value
Industrial Standard	JIS C - 5101-4 (IEC 60384-4)

tan δ (120Hz, +20˚C)

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

Rated Voltage (V)	6.3	10	16	25	35	50	63	100
Z-25˚C / Z+20˚C	4	3	2	2	2	2	2	2
Z-40˚C / Z+20˚C	8	6	4	3	3	3	3	3

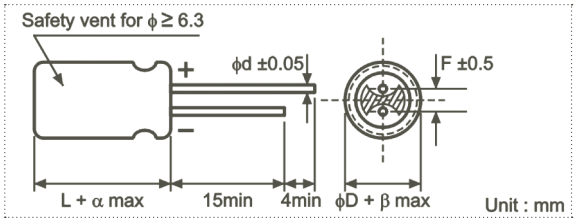
High Temperature Loading

Test time :

ΦD	5~6.3	8~10	12.5
6.3~10WV	4,000h	6,000h	8,000h
16~100WV	5,000h	7,000h	10,000h

Test temperature : +105˚C
Test conditions : Rated DC working voltage with rated ripple current

CASE SIZE TABLE



ΦD	6.3	8 (L <20)	8 (L ≥20)	10	12.5
F	2.5	3.5	3.5	5.0	5.0
Φd	0.5	0.5	0.6	0.6	0.6
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) / Cap (μF)	50	120	300	1k	100k
15~33	0.45	0.55	0.70	0.90	1.00
39~330	0.60	0.70	0.85	0.95	1.00
390~1000	0.65	0.75	0.90	0.98	1.00
1200~3900	0.75	0.80	0.95	1.00	1.00

PART NUMBER SYSTEM (EXAMPLE : 10V 3300μF)

1	2 3	4 5 6	7	8 9	10	11 12	13 14
E	GT	338	M	1A	I	25	RR

- RR — Type (Radial Bulk)
- 25 — Case Length (25mm)
- I — Diameter (12.5mm)
- 1A — Voltage (10V)
- M — Tolerance (±20%)
- 338 — Capacitance (3300μF)
- GT — Series
- E — E-CAP

SAMXON®
Aluminum Electrolytic Capacitors

+105˚C, High Ripple Current (高紋波), Longer Life Assurance (較長壽命), Low Impedance (低阻抗品)

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
120	127							6.3 x 11	0.220	340
220	227				6.3 x 11	0.220	340			
330	337	6.3 x 11	0.220	340				8 x 12	0.130	640
470	477				8 x 12	0.130	640	8 x 16	0.087	840
								10 x 12.5	0.080	865
680	687	8 x 12	0.130	640	8 x 16	0.087	840	8 x 20	0.069	1050
					10 x 12.5	0.080	865	10 x 16	0.060	1210
820	827	10 x 12.5	0.080	865						
1000	108	8 x 16	0.087	840	8 x 20	0.069	1050	10 x 20	0.046	1400
					10 x 16	0.060	1210			
1200	128	8 x 20	0.069	1050	10 x 20	0.046	1400	10 x 25	0.042	1650
		10 x 16	0.060	1210						
1500	158	10 x 20	0.046	1400	10 x 25	0.042	1650	10 x 30	0.031	1910
								12.5 x 20	0.035	1900
2200	228	10 x 25	0.042	1650	10 x 30	0.031	1910	12.5 x 25	0.030	2124
					12.5 x 20	0.035	1900			
2700	278	10 x 30	0.031	1910						
3300	338	12.5 x 20	0.035	1900	12.5 x 25	0.030	2124			
3900	398	12.5 x 25	0.030	2124						

Maximum Allowable Ripple Current (mArms) at 105˚C 100kHz
Maximum Impedance (Ω) at 20˚C 100kHz
Case Size ΦD x L (mm)

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
56	566				6.3 x 11	0.220	340	6.3 x 11	0.300	295
100	107	6.3 x 11	0.220	340				8 x 12	0.170	555
120	127							8 x 16	0.120	730
150	157				8 x 12	0.130	640	10 x 12.5	0.120	760
220	227	8 x 12	0.130	640	8 x 16	0.087	840	10 x 16	0.084	1050
					10 x 12.5	0.080	865			
330	337	8 x 16	0.087	840	10 x 16	0.060	1210	10 x 25	0.055	1440
		10 x 12.5	0.080	865						
470	477	8 x 20	0.069	1050	10 x 20	0.046	1400	10 x 30	0.043	1690
		10 x 16	0.060	1210				12.5 x 20	0.045	1660
560	567				10 x 25	0.042	1650	12.5 x 25	0.034	1950
680	687	10 x 20	0.046	1400	10 x 30	0.031	1910			
					12.5 x 20	0.035	1900			
820	827	10 x 25	0.042	1650						
1000	108	10 x 30	0.031	1910	12.5 x 25	0.030	2124			
		12.5 x 20	0.035	1900						
1500	158	12.5 x 25	0.030	2124						

Maximum Allowable Ripple Current (mArms) at 105˚C 100kHz
Maximum Impedance (Ω) at 20˚C 100kHz
Case Size ΦD x L (mm)

+105˚C, High Ripple Current (高紋波), Longer Life Assurance (較長壽命), Low Impedance (低阻抗品)

STANDARD RATINGS

Voltage (Code)		63V (1J)			100V (2A)		
Cap. (μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
15	156				6.3 x 11	0.960	115
27	276				8 x 12	0.504	232
33	336	6.3 x 11	0.960	115			
39	396				8 x 16	0.360	300
47	476				10 x 12.5	0.344	314
56	566	8 x 12	0.504	232	8 x 20	0.264	362
68	686				10 x 16	0.248	357
82	826	8 x 16	0.360	300	10 x 20	0.168	466
		10 x 12.5	0.344	314			
100	107				10 x 25	0.160	531
120	127	8 x 20	0.264	362	10 x 30	0.120	663
		10 x 16	0.248	357	12.5 x 20	0.128	690
180	187	10 x 20	0.168	466	12.5 x 25	0.096	922
220	227	10 x 25	0.160	531			
270	277	10 x 30	0.120	663			
		12.5 x 20	0.128	690			
330	337	12.5 x 25	0.096	922			

Maximum Allowable Ripple Current (mArms) at 105˚C 100kHz
Maximum Impedance (Ω) at 20˚C 100kHz

Case Size ΦD x L (mm)