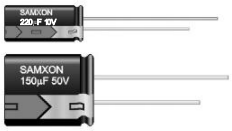
GT Series

SAMXON®

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

FEATURES

1. Low impedance for high frequency
2. Long life:4000~10000 hours at 105℃



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% (120Hz, +20°C)
Leakage Current	I≤0.01CV or 3(µA) (after 2 minutes,whichever is greater) I=Leakage Current(µA) C=Nominal Capacitance(µF) V=Rated Voltage(V)

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

For capacitance value>1000 µF,add 0.02 per another 1000 µF

Low Temperature Characteristics

Impedance ratio max. at 120Hz

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 conditions

Duration :

ϕD	5 ~ 6.3	8~10	12.5
6.3~10WV	4000h	6000h	8000h
16~100WV	5000h	7000h	10000h

Ambient temp. : +105°C

Applied voltage : Rated DC working voltage with max. ripple current

Post test requirements at +20°C

Leakage current : ≤ Initial specified value

Cap. change : within ±25% of initial measured value

tan δ : ≤ 200% of initial specified value

Shelf Life

Test conditions

Duration : 1000 hours

Ambient temp. : +105°C

Applied voltage : (None)

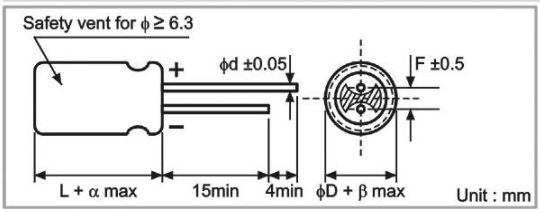
Post test requirements at +20°C

Same limits for high temperature loading

Others

JIS C - 5101（IEC 60384）

CASE SIZE TABLE



ϕD	6.3	8(L < 20)	8(L ≥ 20)	10	12.5			
F	2.5	3.5		5.0	5.0			
ϕd	0.5		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

Cap(µF) \ Coefficient Freq.(Hz)	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:10V3300µF)

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

+105°C, High Ripple Current(高紋波), Long Life Assurance(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							6.3x11	0.220	340
150	157									
220	227				6.3x11	0.220	340			
330	337	6.3x11	0.220	340				8x12	0.130	640
470	477				8x12	0.130	640	8x16	0.087	840
								10x12.5	0.080	865
680	687	8x12	0.130	640	8x16	0.087	840	8x20	0.069	1050
					10x12.5	0.080	865	10x16	0.060	1210
820	827	10x12.5	0.080	865						
1000	108	8x16	0.087	840	8x20	0.069	1050	10x20	0.046	1400
					10x16	0.060	1210			
1200	128	8x20	0.069	1050	10x20	0.046	1400	10x25	0.042	1650
		10x16	0.060	1210						
1500	158	10x20	0.046	1400	10x25	0.042	1650	10x30	0.031	1910
								12.5x20	0.035	1900
2200	228	10x25	0.042	1650	10x30	0.031	1910	12.5x25	0.030	2124
					12.5x20	0.035	1900			
2700	278	10x30	0.031	1910						
3300	338	12.5x20	0.035	1900	12.5x25	0.030	2124			
3900	398	12.5x25	0.030	2124						

Maximum Allowable Ripple Current(mA rms)at 105℃ 100kHz　　Case Size ΦDxL(mm)
Maximum Impedance(Ω) at 20℃ 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
56	566				6.3x11	0.220	340	6.3x11	0.300	295
100	107	6.3x11	0.220	340				8x12	0.170	555
120	127							8x16	0.120	730
150	157				8x12	0.130	640	10x12.5	0.120	760
220	227	8x12	0.130	640	8x16	0.087	840	10x16	0.084	1050
					10x12.5	0.080	865			
330	337	8x16	0.087	840	10x16	0.060	1210	10x25	0.055	1440
		10x12.5	0.080	865						
470	477	8x20	0.069	1050	10x20	0.046	1400	10x30	0.043	1690
		10x16	0.060	1210				12.5x20	0.045	1660
560	567				10x25	0.042	1650	12.5x25	0.034	1950
680	687	10x20	0.046	1400	10x30	0.031	1910			
					12.5x20	0.035	1900			
820	827	10x25	0.042	1650						
1000	108	10x30	0.031	1910	12.5x25	0.030	2124			
		12.5x20	0.035	1900						
1500	158	12.5x25	0.030	2124						

Maximum Allowable Ripple Current(mA rms)at 105℃ 100kHz　　Case Size ΦDxL(mm)
Maximum Impedance(Ω) at 20℃ 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.

+105°C, High Ripple Current(高紋波), Long Life Assurance(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				6.3x11	0.960	115			
27	276				8x12	0.504	232			
33	336	6.3x11	0.960	115						
39	396				8x16	0.360	300			
47	476				10x12.5	0.344	314			
56	566	8x12	0.504	232	8x20	0.264	362			
68	686				10x16	0.248	357			
82	826	8x16	0.360	300	10x20	0.168	466			
		10x12.5	0.344	314						
100	107				10x25	0.160	531			
120	127	8x20	0.264	362	10x30	0.120	663			
		10x16	0.248	357	12.5x20	0.128	690			
180	187	10x20	0.168	466	12.5x25	0.096	922			
220	227	10x25	0.160	531						
270	277	10x30	0.120	663						
		12.5x20	0.128	690						
330	337	12.5x25	0.096	922						

Maximum Allowable Ripple Current(mA rms)at 105℃ 100kHz

Maximum Impedance(Ω) at 20℃ 100kHz

Case Size ΦDxL(mm)

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