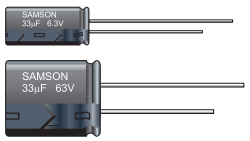
SAMSON

SNP Series

Nonpolar(無極性)

FEATURES

1. Standard non-polarized series for entertainment electronics.



SPECIFICATIONS

Item	Performance Characteristics
Operating Temperature Range	-40 to +85°C
Rated Working Voltage Range	6.3 to 100V
Nominal Capacitance Range	0.47 to 6800μF
Capacitance Tolerance	±20% (120Hz, +20°C)
Leakage Current	I ≤ 0.03CV or 3(μA) whichever is greater measured after 5 minutes application of rated working voltage at +20°C

Dissipation Factor tan δ (120Hz, +20°C)

Working Voltage (V)	6.3	10	16	25	35	50	63	100
tan δ (max.)	0.26	0.24	0.22	0.20	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	63	100
Z-25°C / Z+20°C	4	3	2	2	2	2	2	2
Z-40°C / Z+20°C	10	8	6	5	4	4	3	3

High Temperature Loading

Test conditions
Duration : 1000 hours
Ambient temp. : +85°C
Applied voltage : Rated DC working voltage to each polarity every 250 hours

Post test requirements at +20°C
Leakage current : ≤ Initial specified value
Cap. change : within ±20% of initial measured value
tan δ : ≤ 200% of initial specified value

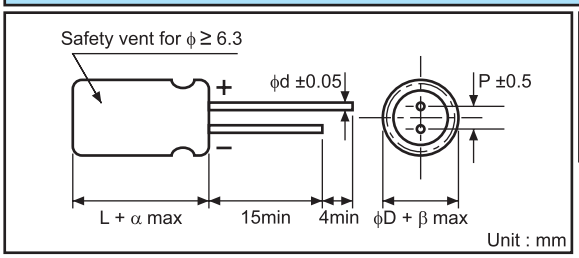
Shelf Life

Test conditions
Duration : 500 hours
Ambient temp. : +85°C
Applied voltage : (None)

Post test requirements at +20°C
Same limits for high temperature loading.

Others	JIS C - 5141 JIS C - 5102

CASE SIZE TABLE



ϕD	5	6.3	8	10	12.5	16	18		
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5		
ϕd	0.5			0.6		0.8			
α	(L < 20) 1.5			(L ≥ 20) 2.0					
β	(L < 20) 0.5			(L ≥ 20) 1.0					

RIPPLE CURRENT MULTIPLIER

Temperature Coefficient

Temperature(°C)	~ 55	60	70	85	
Factor	1.65	1.50	1.30	1.00	

Frequency Coefficient

Cap(μF) \ Freq.(Hz)	50	120	300	1K	10K ~
≤ 47	0.75	1.00	1.35	1.57	2.00
47 ~ 220	0.80	1.00	1.23	1.34	1.50
≥ 330	0.85	1.00	1.10	1.13	1.15

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DIMENSIONS

Voltage (Code)		6.3V		10V		16V		25V	
Cap.(μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.47	474								
1	105								
2.2	225								
3.3	335								
4.7	475							5 x 11	26
10	106					5 x 11	42	5 x 11	42
22	226			5 x 11	57	5 x 11	57	6.3 x 11	65
33	336	5 x 11	64	5 x 11	64	5 x 11	70	6.3 x 11	80
47	476	5 x 11	76	5 x 11	76	6.3 x 11	95	6.3 x 11	95
100	107	6.3 x 11	125	6.3 x 11	125	8 x 12	160	8 x 12	160
220	227	8 x 12	215	8 x 12	215	10 x 12.5	275	10 x 16	305
330	337	8 x 12	265	10 x 16	345	10 x 16	375	12.5 x 20	450
470	477	10 x 12	370	10 x 16	410	10 x 20	485	12.5 x 20	540
1000	108	10 x 20	650	10 x 20	620	12.5 x 25	855	16 x 25	950
				12.5 x 20	720				
2200	228	12.5 x 25	1160	16 x 25	1280	16 x 30	1510	18 x 35	1620
3300	338	16 x 25	1570	16 x 30	1690	18 x 35	1980		
4700	478	16 x 30	2020	18 x 35	2160				
6800	688	18 x 35	2600						

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

Case Size ϕD x L(mm)

Voltage (Code)		35V		50V		63V		100V	
Cap.(μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.47	474			5 x 11	11			5 x 11	14
0.68	684			5 x 11	13				
1	105			5 x 11	17	5 x 11	18	5 x 11	21
1.5	155			5 x 11	20				
2.2	225			5 x 11	25			6.3 x 11	34
3.3	335			5 x 11	27	5 x 11	28	6.3 x 11	39
4.7	475	5 x 11	34	5 x 11	34	6.3 x 11	34	6.3 x 11	47
								8 x 12	48
10	106	5 x 11	43	6.3 x 11	52	6.3 x 11	57	8 x 12	71
22	226	6.3 x 11	73	8 x 12	89	8 x 12	95	10 x 16	135
33	336	8 x 12	100	8 x 12	105	10 x 12.5	135	12.5 x 20	220
47	476	8 x 12	120	8 x 12	130	10 x 16	180	12.5 x 20	240
				10 x 12.5	150				
68	686			10 x 16	198				
100	107	10 x 12.5	187	10 x 20	265	12.5 x 20	320	16 x 25	425
		10 x 16	230						
220	227	12.5 x 20	410	12.5 x 25	480	16 x 25	575	18 x 35	720
330	337	12.5 x 20	505	16 x 25	650	16 x 30	655		
470	477	12.5 x 25	655	16 x 30	835	18 x 35	965		
1000	108	16 x 30	1140						
2200	228			22 x 40	1800				
3300	338								
4700	478								
6800	688								

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

Case Size ϕD x L(mm)