

DP Series

SAMXON®

Lug/Snap-in Terminal Type(插入/自立型), Long Life(長壽命), Low ESR(低阻抗)

FEATURES

1. High ripple current and high reliability.
2. Low equivalent series resistance ESR.
3. Different case sizes available for each capacitance value.
4. Load life with ripple current : 5000 hours.



SPECIFICATIONS

Item	Performance Characteristics					
Operating Temperature Range	-40 to +85°C			-25 to +85°C		
Rated Working Voltage Range	160 to 250V			385 to 450V		
Nominal Capacitance Range	47 to 2200µF					
Capacitance Tolerance	±20% (120Hz, +20°C)					
Leakage Current	I ≤ 3 √CV (µA) after 5 minutes application of rated working voltage at +20°C					
Dissipation Factor tan δ (120Hz, +20°C)	Working Voltage (V)	160 ~ 400	450			
	tan δ (max.)	0.15	0.20			
Low Temperature Characteristics	Impedance ratio max. at 120Hz					
	Working Voltage (V)	160	200	250	385	400 ~ 450
	Z-25°C / Z+20°C	3	3	3	5	8
	Z-40°C / Z+20°C	12	-	-	-	-
High Temperature Loading	Testing time	: 5000 hours			Post test requirements at 20 C	
	Testing temp.	: +85°C			Leakage current : ≤ Initial specified value	
	Testing condition : Rated DC working voltage with the max. ripple current				Cap. change : within ±20% of initial measured value	
					tan δ : ≤ 200% of initial specified value	
Shelf Life	At 85°C no voltage applied after 1000 hours and then being stabilized at 20°C the capacitors shall meet the following limits					
	Leakage current : ≤ Initial specified value					
	Cap. change : within ±15% of initial measured value					
	tan δ : ≤ 150% of initial specified value					
Others	JIS C - 5101 (IEC 60384-4)					

RIPPLE CURRENT MULTIPLIER

Temperature Coefficient	Frequency Coefficient
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- 1) Maximum rms ripple current at 120Hz, 85°C are given in the table.
- 2) Temperature multiplying factor:
Where capacitors are operated at temperature other than 85°C, the maximum ripple current must be multiplied by the figure shown in the table below.

- 3) Frequency multiplying factor:
If capacitors are used to filter circuits at a frequency other than 120Hz, the maximum ripple current must be multiplied by the figure shown in the table below.

Temperature(°C)	20 ~ 45	65	75	85	Freq.(Hz)	60	120	1K	10 ~ 50K
Factor	1.37	1.25	1.18	1.00	160 ~ 250V	0.80	1.00	1.15	1.47
					385 ~ 450V	0.80	1.00	1.15	1.47

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DIMENSIONS

Voltage (Code)		160V (2C)			200V (2D)			250V (2E)		
Cap.(μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
150	157							22 x 25	800	0.91
220	227	22 x 25	730	1.10	22 x 25	490	1.10	22 x 30	500	1.20
								25 x 25	490	1.20
330	337	22 x 30	490	1.40	22 x 30	330	1.40	22 x 40	330	1.60
					25 x 25	330	1.50	25 x 30	330	1.60
470	477	22 x 35	350	1.80	22 x 40	240	1.90	25 x 40	240	2.10
					30 x 25	350	1.90	30 x 30	240	2.00
680	687	25 x 35	240	2.40	25 x 40	160	2.50	30 x 40	160	2.70
					30 x 30	160	2.40			
1000	108	30 x 35	160	3.10	30 x 40	120	3.30	35 x 40	120	3.60
					35 x 35	120	3.50			
1500	158	30 x 45	120	4.20	35 x 45	80	4.60			
2200	228	35 x 50	80	5.80						

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

Case Size φD x L(mm)

Maximum Impedance (mΩ) at 20°C 20KHz

Voltage (Code)		385V (2Y)			400V (2G)			420V (2M)		
Cap.(μF)	Code	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
68	686	22 x 25	1570	0.61	22 x 25	1570	0.61			
100	107	22 x 30	1070	0.79	22 x 30	1070	0.79	22 x 30	1600	0.79
		25 x 25	1070	0.80	25 x 25	1070	0.80	25 x 25	1600	0.80
120	127				22 x 35	890	0.92	22 x 30	1330	0.94
150	157	22 x 40	720	1.10	22 x 40	720	1.10	22 x 40	1070	1.08
		25 x 30	720	1.00	30 x 25	720	1.10	25 x 35	1070	1.11
180	187				30 x 30	600	1.20	25 x 35	890	1.21
								30 x 30	890	1.26
220	227	25 x 40	490	1.40	25 x 40	490	1.40	25 x 40	730	1.41
		30 x 30	490	1.40	30 x 35	490	1.50	30 x 35	730	1.46
270	277				30 x 35	400	1.60	30 x 35	590	1.62
								35 x 30	590	1.71
330	337	30 x 40	330	1.90	30 x 45	330	2.00	30 x 45	490	1.96
								35 x 35	490	1.98
390	397				30 x 50	280	2.20	30 x 50	410	2.22
470	477	35 x 40	240	2.50	35 x 45	240	2.60	35 x 45	340	2.58
560	567	35 x 45	200	2.80	35 x 50	200	2.90	35 x 50	290	2.93

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

Case Size φD x L(mm)

Maximum Impedance (mΩ) at 20°C 20KHz

Voltage (Code)		450V (2W)								
Cap.(μF)	Code	Case Size	Impedance	Ripple Current						
47	476	22 x 25	3400	0.51						
68	686	22 x 30	2350	0.65						
		25 x 25	2350	0.66						
100	107	22 x 40	1600	0.88						
		25 x 30	1600	0.86						
150	157	30 x 25	1600	0.90						
		25 x 40	1070	1.20						
180	187	30 x 30	1070	1.10						
		30 x 35	890	1.30						
220	227	30 x 40	730	1.50						
270	277	30 x 45	600	1.80						
330	337	35 x 40	490	2.10						
470	477	35 x 50	350	2.70						

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

Case Size φD x L(mm)

Maximum Impedance (mΩ) at 20°C 20KHz

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