- Long-life grade (up to 2000 hours @ 105°C)
- Standard snap-in pin style
- Case size options

The DPG is a snap-in electrolytic capacitor featuring a higher degree of volumetric efficiency than previous types.

The product is particularly suited for the high-voltage end of switching power supplies. The high ripple current capability is very useful in motor-drive applications.

SPECIFICATION

Item	Electrical Characteristics								
Operating Temperature Range	-40° to +105°C -25° to +105°C								
Rate Working Voltage Range	6.3 to 100VDC 160 to 450VDC								
Capacitance Tolerance	±20% (At 20°C, 120Hz)								
DC Current Leakage (μA)	I = ≤0.02 CV, L= 20m/m, I= 0.03mA Whichever is smaller. (At 25°C, After 5 Minutes) Where, I: Leakage Current (μA) C: Nominal Capacitance (μF) V: Rated Voltage (V)								
Dissipation Factor (tand∂)	Rate Voltage (V)	6.3	10	16	25	35	50	63-100	160-450
	D.F (%)	60	55	50	45	35	30	30	15
	* Note: 15% For D = 35m/m or L = 20m/m (At 20°C, 120Hz) (WV = 6.3 to 100V For capacitor whose capacitance exceeds 1000μF The value of D.F (%) is increased by 2% for every addition of 1000μF								
Low Temperature Characteristics (120Hz)	Rated Voltage (V)	6.3-16	25	35	50-63	80-100	160-400	450	
	Z(–25°C) / (Z+20°C)	4	3	3	2	2	4	8	
	Z(–40°C) / (Z+20°C)	15	10	8	6	5	-	-	
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with maximum ripple current is applied for 2000 hours at 105°C. Capacitance Change ≤±20% of the initial value D.F ≤200% of the initial specified value Leakage Current ≤ the initial specified value								
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 25°C after exposing them for 1000 hours at 105°C without voltage applied. Capacitance Change ≤±20% of the initial value D.F ≤150% of the initial specified value Leakage Current ≤ 150% of the initial specified value								

ORDERING INFORMATION

DPG	47	AC	400
Range	Capacitance μf	Case Code (see below)	Voltage

Two letter case code AC = 22.4mm dia. x 30mm height.

Diameter	Height
A = 22.4mm	A = 20mm
B = 25mm	B = 25mm
C = 30mm	C = 30mm
D = 35.5mm	D = 35mm
	E = 40mm
	F = 45mm
	G = 50mm

RIPPLE CURRENT MULTIPLIERS

1) Maximum rms ripple currents at 120Hz, 85°C and 105°C are given in the table.
2) Temperature multiplying factor;
   Where capacitors are operated at temperature other than 105°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 rated 120Hz rms ripple current shown must be multiplied by the factor shown in the table below.

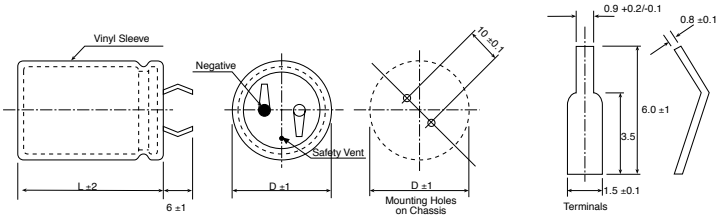
AMBIENT TEMP./MULTIPLYING FACTOR

Temperature coefficient				
Temperature (°C)	60	70	85	105
Factor	2.37	2.17	1.67	1.00

FREQUENCY/MULTIPLYING FACTOR

Frequency coefficient					
Freq(Hz)/Cap(uF)	50	60	120	1K	10K - 00K
6.3 to 100V	0.88	0.90	1.00	1.15	1.16
160 to 250V	0.85	0.88	1.00	1.15	1.20
315 to 450V	0.88	0.9	1.00	1.10	1.15

OUTLINE DRAWING



W.V.	Cap [µF]	Case Size øDxL[mm]	Max Ripple Current [A] rms (120Hz/105°C)
10V	6800	25x25	1.30
	10000	20x30	1.84
	15000	25x25	1.90
	22000	25x30	2.25
	33000	25x45	3.3
		30x35	
		35.5x30	
	47000	30x45	3.8
		35x35	
	68000	35.5x50	5.5
16V	6800	22.4x25	1.55
	10000	22.4x30	1.95
		25x25	
	15000	22.4x40	2.55
		25x35	
		30x30	
	22000	25x45	3.3
		30x35	
	33000	30x45	4.30
		35.5x35	
	47000	35.5x45	5.4
25V	4700	22.4x25	1.79
		25x30	
		30x25	
	6800	25x25	1.85
	10000	22.4x40	2.40
		25x35	
		30x30	
	15000	25x45	3.15
		30x35	
		35.5x30	
	22000	30x45	3.75
		35.5x35	
	33000	35.5x50	5.40
35V	4700	22.4x35	1.80
		25x25	
	6800	22.4x40	2.70
		25x35	
		30x30	
	10000	25x45	3.30
		30x35	
		35.5x30	
	15000	30x45	3.91
		35.5x35	
	22000	35.5x50	4.59
50V	2200	22.4x30	1.55
	3300	24.4x35	1.87
		25x30	

W.V.	Cap [µF]	Case Size øDxL[mm]	Max Ripple Current [A] rms (120Hz/105°C)
50V	4700	22.4x45	2.25
		25x40	
		30x30	
		35.5x25	
	6800	25x50	3.25
		30x40	
		35.5x30	
	10000	30x50	4.00
		35.5x40	
	15000	35.5x50	4.77
63V	1000	20x25	1.10
	1500	22.4x30	1.30
		25x25	
	2200	22.4x35	1.70
		25x30	
	3300	22.4x50	2.10
		25x40	
		30x30	
		35.5x25	
	4700	25x50	2.80
		30x40	
		35.5x30	
	6800	30x50	3.65
		35.5x40	
	10000	35.5x50	4.40
80V	1000	22.4x30	1.20
		25x25	
	1500	22.4x35	1.45
		25x30	
	2200	22.4x45	2.00
		25x35	
		30x30	
		35.5x25	
	3300	25x50	2.40
		30x40	
		35.5x30	
	4700	30x50	3.30
		35.5x40	
	6800	35.5x50	4.72
100V	680	24.4x25	1.04
	1000	24.4x35	1.43
		25x30	

W.V.	Cap [µF]	Case Size øDxL[mm]	Max Ripple Current [A] rms (120Hz/105°C)
100V	1500	22.4x45	1.95
		25x40	
		30x30	
		35.5x25	
	2200	25x50	2.53
		30x40	
		35.5x30	
	3300	30x50	3.25
		35.5x40	
	4700	35.5x50	4.53
160V	220	22.4x25	0.66
	330	24.4x25	1.20
	470	22.4x35	1.28
	680	22.4x45	1.64
		25x35	
	1000	25x45	2.17
		30x35	
	1500	30x45	2.62
		35.5x35	
	2200	35.5x50	3.34
200V	220	22.4x25	0.78
	330	22.4x30	1.20
		25x25	
	470	22.4x35	1.40
		25x35	
		25x30	
	680	25x40	1.75
		30x30	
	1000	30x45	2.30
		35.5x35	
	1500	35.5x50	2.21
250V	220	22.4x30	0.97
		25x25	

W.V.	Cap [µF]	Case Size øDxL[mm]	Max Ripple Current [A] rms (120Hz/105°C)
250V	330	22.4x40	1.21
		30x25	
	470	30x30	1.52
	680	35.5x35	1.92
	1000	35.5x40	2.3
400V	47	22.4x30	0.35
	68	22x25	0.49
	100	22.4x35	0.62
		25x30	
	220	25x45	1.00
		30x35	
		35.5x30	
	330	30x45	1.40
		35.5x40	
	470	35x40	1.75