

RF Power Plate Capacitors with Contoured Rim, Class 1 Ceramic



FEATURES

- Low losses
- High reliability
- Wide range of capacitance values

APPLICATIONS

- Induction and dielectric heating
- Antenna units
- Filter, bypass and coupling circuits

CAPACITANCE RANGE

25 pF to 6.0 nF

CAPACITANCE TOLERANCE

< 10 pF: ± 2 pF; ± 1 pF; ± 0.5 pF
 ≥ 10 pF: ± 20 %; ± 10 %; ± 5 %

CERAMIC DIELECTRIC

- R7 (TCC + 100 ppm/K)
- R16 (TCC + 100 ppm/K)
- R42 (TCC - 250 ppm/K)
- R85 (TCC - 750 ppm/K)
- R230 (TCC - 750 ppm/K)

RATED VOLTAGE

- 11 kV_p
- 12 kV_p
- 13 kV_p
- 14 kV_p
- 15 kV_p
- 16 kV_p

DIELECTRIC STRENGTH TEST

200 % of rated voltage, 50 Hz

DISSIPATION FACTOR

R7: Max. 0.07 %
 R16: Max. 0.04 %
 R42, R85, R230: Max. 0.05 %

Measuring frequencies:
 1 MHz (< 1 nF); 300 kHz or 100 kHz (≥ 1 nF)

INSULATION RESISTANCE

Min. 10 000 MΩ (at 25 °C)

OPERATING TEMPERATURE RANGE

- 55 °C to + 100 °C

QUICK REFERENCE DATA				
DESCRIPTION	VALUE			
Ceramic Class	1			
Ceramic Dielectric	R7, R16, R42, R85, R230			
Type	PA 70 PC 70 PD 70	PA 100 PC 100 PD 100 PE 100	PA 140 PC 140 PD 140 PE 140	PA 200 PC 200 PD 200 PE 200
Voltage (V _p)	11 000, 12 000, 13 000, 14 000	11 000, 13 000, 14 000, 15 000	12 000, 13 000, 14 000, 15 000, 16 000	12 000, 13 000, 14 000, 15 000
Min. Capacitance (pF)	25	50	100	160
Max. Capacitance (pF)	800	1600	3000	6000
Mounting	Screw terminal/band terminal			

MATERIAL

Capacitor elements made from Class 1 ceramic dielectric with noble metal electrodes.

Flexible connection terminals made from copper/brass, silver plated, to allow for series and parallel interconnection

FINISH

Noble metal electrodes and terminals are protective lacquered. The contoured insulating rim is additionally glazed

MARKING

Type designator, capacitance value and tolerance, rated peak voltage, ceramic material code, production date code, manufacturer logo.

ACCESSORIES ADDED

Two screws and washers (PD, PE)



SAP PART NUMBER AND ELECTRICAL DATA						
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _P)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})	
					PD	PA, PC
TYPE P. 70						
P#0070WJ250##BF1	R7	25	14	15	16	10
P#0070WJ300##BF1		30				
P#0070WJ400##BG1	R16	40	14	20		
P#0070WJ500##BG1		50				
P#0070WJ600##BG1		60				
P#0070WF800##BG1		80	12			
P#0070WJ101##BH1	R42	100	14	20		
P#0070WH121##BH1		120	13			
P#0070WH161##BH1		160				
P#0070WJ201##BJ1	R85	200	14	20		
P#0070WJ251##BJ1		250				
P#0070WJ301##BJ1		300				
P#0070WH401##BJ1		400	13			
P#0070WH501##BJ1		500				
P#0070WF601##BJ1		600	12			
P#0070WE801##BJ1		800	11			

SAP PART NUMBER AND ELECTRICAL DATA							
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _P)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})		
					PE	PD	PA, PC
TYPE P. 100							
P#0100BJ500##BF1	R7	50	15	30	35	25	15
P#0100BJ600##BF1		60					
P#0100BJ800##BG1	R16	80	15	40			
P#0100BJ101##BG1		100					
P#0100BJ121##BG1		120					
P#0100WH161##BG1		160	13				
P#0100BJ201##BH1	R42	200	15	40			
P#0100WJ251##BH1		250	14				
P#0100WH301##BH1		300	13				
P#0100WJ401##BJ1	R85	400	14	40			
P#0100WJ501##BJ1		500					
P#0100WJ601##BJ1		600					
P#0100WJ801##BJ1		800	13				
P#0102WH102##BJ1		1000					
P#0100WH122##BJ1		1200	11				
P#0100WE162##BJ1		1600					

Notes

- # 2nd digit: Code letter of terminal version A, C, D, E
 - ## 14th to 15th digit: Capacitance tolerance code ± 20 % = 38; ± 10 % = 36; ± 5 % = 33
- ⁽¹⁾ The surface temperature during operation must not exceed + 100 °C



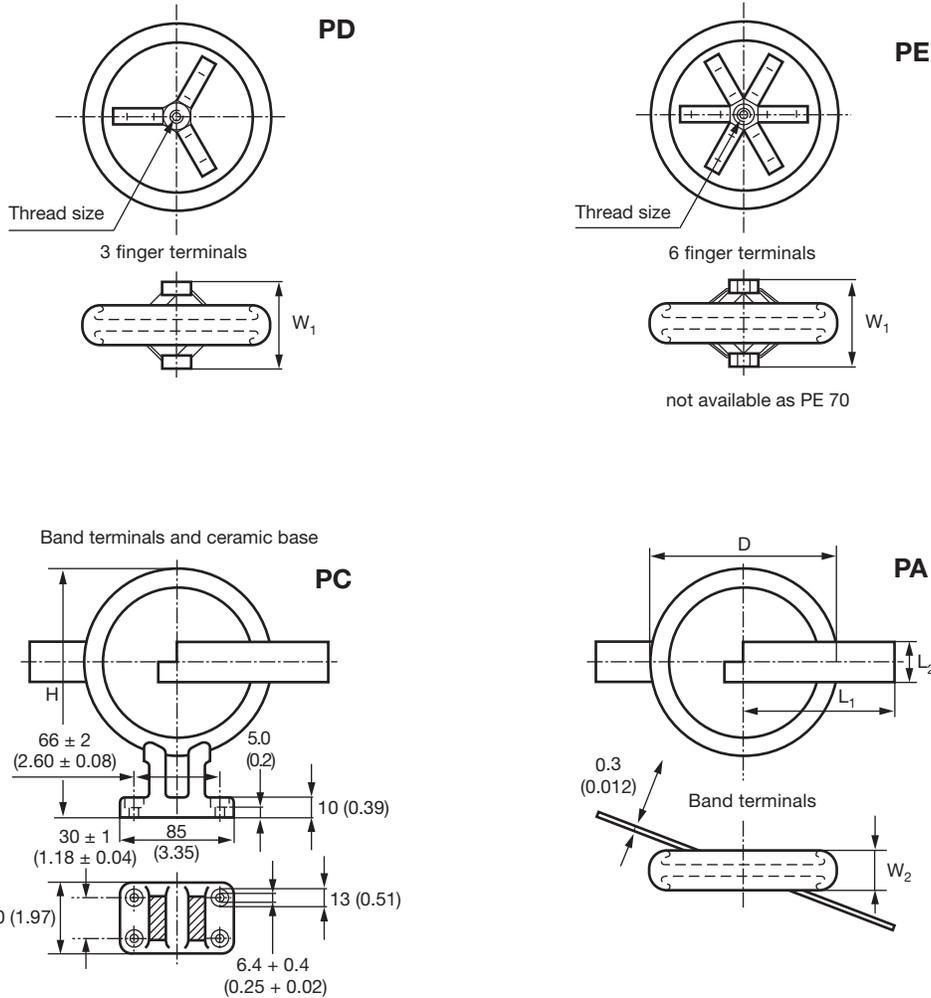
SAP PART NUMBER AND ELECTRICAL DATA							
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _p)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})		
					PE	PD	PA, PC
TYPE P. 140							
P#0140BJ101##BF1	R7	100	15	67.5	45	30	20
P#0140BJ121##BF1		120					
P#0140BJ161##BG1	R16	160	15	90			
P#0140BJ201##BG1		200					
P#0140BJ251##BG1		250					
P#0140WJ301##BG1	R42	300	14	90			
P#0140BJ401##BH1		400	15				
P#0140WJ501##BH1		500	14				
P#0140WH601##BH1		600	13				
P#0140WH801##BH1	800						
P#0140WJ102##BJ1	R85	1000	14	90			
P#0140WJ122##BJ1		1200					
P#0140WJ162##BJ1		1600					
P#0140WH202##BJ1		2000	13				
P#0140WH252##BJ1		2500					
P#0140WF302##BJ1		3000			12		
P#0140WL302##BK1	R230	3000	16	90	45	(2)	(2)

SAP PART NUMBER AND ELECTRICAL DATA								
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _p)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})			
					PE	PD	PA, PC	
TYPE P. 200								
P#0200BJ161##BF1	R7	160	15	112	60	40	25	
P#0200BJ201##BF1		200						
P#0200BJ251##BF1		250						
P#0200WJ301##BF1		300						14
P#0200WF401##BF1		400						12
P#0200BJ501##BG1	R16	500	15	150				
P#0200BJ601##BG1		600						
P#0200BJ801##BH1	R42	800	15	150				
P#0200WJ102##BH1		1000	14					
P#0200WJ122##BH1		1200						
P#0200WJ162##BH1		1600						
P#0200WJ202##BJ1	R85	2000	14	150				
P#0200WJ252##BJ1		2500						
P#0200WJ302##BJ1		3000						
P#0200WH402##BJ1		4000	13					
P#0200WH502##BJ1		5000						
P#0200WF602##BJ1		6000			12			

Notes

- # 2nd digit: Code letter of terminal version A, C, D, E
 - ## 14th to 15th digit: Capacitance tolerance code ± 20 % = 38; ± 10 % = 36; ± 5 % = 33
- (1) The surface temperature during operation must not exceed + 100 °C
(2) Only PE type available

DIMENSIONS in millimeters (inches)



TYPE	PA 70 PC 70 PD 70 (2)	PA 100 PC 100 PD 100 PE 100	PA 140 PC 140 PD 140 PE 140	PA 200 PC 200 PD 200 PE 200
Diameter D_{max} .	70 (2.76)	100 (3.52)	140 (5.51)	200 (7.87)
Thread size	M6	M8	M8	M10
Width W_1	35 ± 1 (1.38 ± 0.04)	40 ± 1 (1.58 ± 0.04)	40 ± 1 (1.58 ± 0.04)	45 ± 1 (1.77 ± 0.04)
Width W_2 ⁽¹⁾	30 (1.81)	30 (1.81)	30 (1.81)	32 (1.26)
Height H	116 (4.57)	146 (5.75)	186 (7.32)	246 (9.69)
Length L_1	100 (3.94)	140 (5.51)	140 (5.51)	200 (7.87)
Length L_2	15 (0.59)	30 (1.18)	30 (1.18)	30 (1.18)

Notes

⁽¹⁾ Dimension W_2 will vary depending upon capacitance

⁽²⁾ Type PE 70 is not available



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