

RF Power Feed-Through Capacitors with Mounting Tags, Class 1 Ceramic



FEATURES

- Small size
- Geometry minimizes inductance
- Wide range of capacitance values

APPLICATIONS

Filtering purposes in industrial and medical RF power equipment, where high voltages and high feed-through currents are required

CAPACITANCE RANGE

200 pF to 1.5 nF

CAPACITANCE TOLERANCE

± 20 %; ± 10 %; ± 5 %

CERAMIC DIELECTRICS

R85 (TCC - 750 ppm/K)

RATED VOLTAGE

- 3.0 kV_p
- 4.0 kV_p

DIELECTRIC STRENGTH TEST

200 % of rated AC voltage (50 Hz, 5 minutes)

DISSIPATION FACTOR

Max. 0.05 %

Measuring frequencies:

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

INSULATION RESISTANCE

Min. 100 000 MΩ (at 25 °C)

OPERATING TEMPERATURE RANGE

-55 °C to +100 °C

QUICK REFERENCE DATA

DESCRIPTION	VALUE			
Ceramic Class	1			
Ceramic Dielectric	R85			
Type	DF 016030	DF 016040	DF 016060	
Voltage (V _p)	3000	3000	3000	4000
Min. Capacitance (pF)	200	500	1000	800
Max. Capacitance (pF)	600	800	1500	800
Mounting	Screw terminal			

MATERIAL

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

Connection terminals made from copper / brass, silver plated.

For higher feed-through current, an additional feed-through conductor must be provided.

FINISH

Capacitor body completely protective lacquered.

MARKING

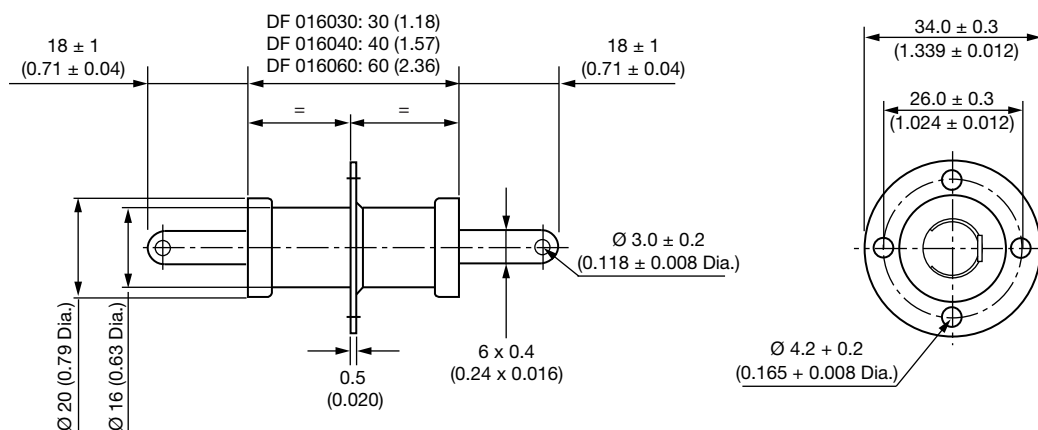
Type designator, capacitance value and tolerance, rated peak voltage, ceramic material code, production date code, manufacturer logo.

SAP PART NUMBER AND ELECTRICAL DATA

PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _p)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})	FEED-THROUGH CURRENT ⁽²⁾ (A)
TYPE DF 016030						
DF016030BC201##BJ1	R85	200	3.0	4.0	5.0	6.0
DF016030BC401##BJ1		400				
DF016030BC601##BJ1		600				
TYPE DF 016040						
DF016040BC501##BJ1	R85	500	3.0	5.0	5.0	6.0
DF016040BC701##BJ1		700				
DF016040BC801##BJ1		800				
TYPE DF 016060						
DF016060BD801##BJ1	R85	800	4.0	7.5	5.0	6.0
DF016060BC102##BJ1		1000	3.0			
DF016060BC122##BJ1		1200				
DF016060BC152##BJ1		1500				

Notes

- ## 14th to 15th digit: capacitance tolerance code $\pm 20\% = 38$, $\pm 10\% = 36$, $\pm 5\% = 33$
- (1) The surface temperature during operation must not exceed +100 °C
- (2) DC or low frequency RMS current (< 20 kHz)

DIMENSIONS in millimeters (inches)

MOUNTING GUIDELINES

- The connection to one electrode must be flexible in order to prevent the generation of physical force which could damage the capacitor elements. Such forces are often generated by the dimensional differences resulting from the normal physical tolerances of these components.
- The capacitor elements must not be used as a mechanical support for other devices or components.

RELATED DOCUMENTS

General Information

www.vishay.com/doc?22071



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