

RF Power Feed-Through Capacitors with Conductor Rod, Class 1, R16 HQ Ceramic Dielectric



QUICK REFERENCE DATA

DESCRIPTION	VALUE	
Ceramic Class	1	
Ceramic Dielectric	R16 HQ	
Type	DB 055135	DBZ 055135
Voltage (V_p)	20 000	
Min. Capacitance (pF)	100	
Max. Capacitance (pF)	100	
Mounting	Screw terminal	

MATERIAL

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

Connection terminals:
made from copper / brass, silver plated

FINISH

Capacitor body completely protective lacquered.
The contoured insulating rims are additionally glazed.

MARKING

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

ACCESSORIES ADDED

All feed-through capacitors are supplied with the necessary nuts and washers to make the connection to the conductor rod.

FEATURES

- High voltage ratings
- High feed-through currents
- Two different versions of the outer electrode terminal

APPLICATIONS

These capacitors feature a Q-factor greater than 10 000 which makes it well suited in operating frequency range from 0.1 MHz up to 30 MHz where high voltages and currents are present.

CAPACITANCE RANGE

100 pF

CAPACITANCE TOLERANCE

$\pm 10 \%$

CERAMIC DIELECTRICS

R16 High Q (TCC + 100 ppm/K)

RATED VOLTAGE

20 kV_p

DIELECTRIC STRENGTH TEST

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

RF POWER TEST

114 % of rated power, for 5 minutes in a test generator circuit

DISSIPATION FACTOR

Max. 0.025 % (1 MHz)

INSULATION RESISTANCE

Min. 100 000 M Ω (at 25 °C)

OPERATING TEMPERATURE RANGE

-55 °C to +100 °C



SAP PART NUMBER AND ELECTRICAL DATA

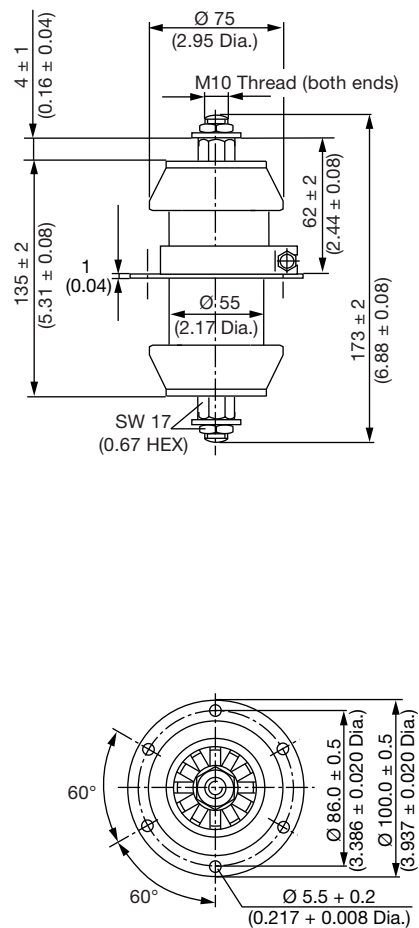
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _p)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})	FEED-THROUGH CURRENT ⁽²⁾ (A)
TYPE DB 055135						
DB055135WP10136CB1	R16 HQ	100	20.0	Max. 900.0	150.0	80.0
TYPE DBZ 055135						
DBZ55135WP10136CB1	R16 HQ	100	20.0	Max. 900.0	150.0	80.0

Notes

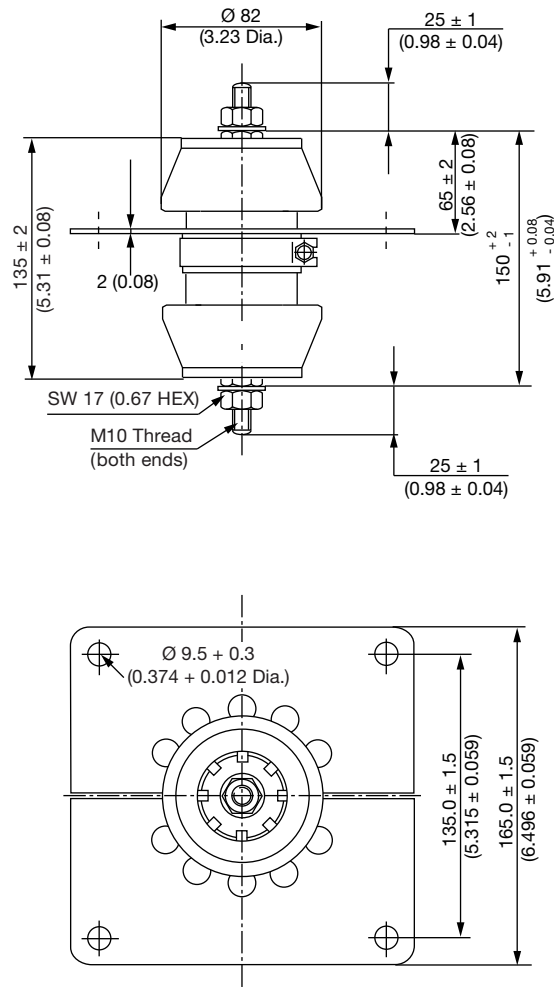
- (1) The surface temperature during operation must not exceed +100 °C
(2) DC or low frequency RMS current (< 20 kHz)

DIMENSIONS in millimeters (inches)

DB 055135



DBZ 055135



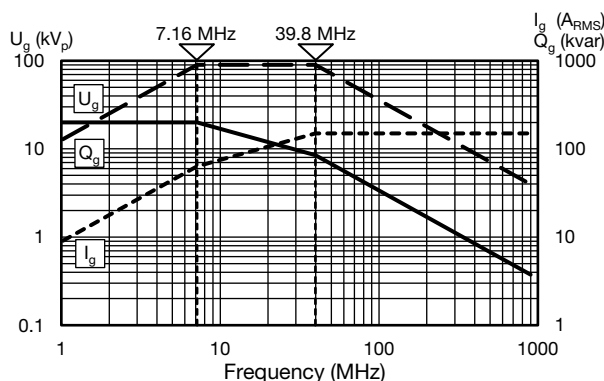


MOUNTING GUIDELINES

- 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.
- Use two wrenches when tightening the nuts on both sides of the conductor rod.
The outer electrode terminal flange of these feed-through capacitors components should be fixed after tightening the inner electrode's connection.
- Make sure that not too much force applied to the solder connections between hardware and noble metal electrode. A torque less than 5 Nm is recommended.

DERATING DIAGRAM

DB055135WP10136CB1, DBZ55135WP10136CB1



RELATED DOCUMENTS

General Information

www.vishay.com/doc?22071



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