

## RF Power Barrel Capacitors for Dielectric Heating Equipment, R16 HQ Ceramic Dielectric



### QUICK REFERENCE DATA

DESCRIPTION	VALUE
Ceramic Class	1
Ceramic Dielectric	R16 HQ
Type	TOSZ 100110
Voltage ( $V_p$ )	30 000
Min. Capacitance (pF)	50
Max. Capacitance (pF)	50
Mounting	Screw terminal

### MATERIAL

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

Connection terminals:

thread terminal, copper / brass, silver plated.

Allowable torque: M4 thread 3.5 Nm (31 lbf in)

M8 thread 6.0 Nm (53 lbf in)

### FINISH

Capacitor body completely glazed.

### MARKING

Type designator, capacitance value and tolerance, rated peak voltage, ceramic material code, production date code, manufacturer logo, serial no.

### FEATURES

These capacitors feature a Q-factor of greater than 10 000 which makes them ideal in operating frequency range from 0.1 MHz up to 30 MHz where high voltages and currents are present. The TOSZ model can be used as replacement for fixed vacuum capacitors. The construction gives the capacitors an advantage over fixed vacuum capacitors, because there is no possibility of vacuum deterioration.

### APPLICATIONS

Dielectric heating equipments in industrial segment

### CAPACITANCE RANGE

50 pF

### CAPACITANCE TOLERANCE

$\pm 10 \%$

### CERAMIC DIELECTRICS

R16 High Q (TCC + 100 ppm/K)

### RATED VOLTAGE

30 kV<sub>p</sub>

### DIELECTRIC STRENGTH TEST

140 % rated AC voltage (30 000 V<sub>RMS</sub>, 50 Hz, 5 minutes)

### RF POWER TEST

125 % of rated power, for 5 minutes in a test generator circuit

### DISSIPATION FACTOR

Max. 0.025 % (1 MHz)

### INSULATION RESISTANCE

Min. 100 000 M $\Omega$  (at 25 °C)

### OPERATING TEMPERATURE RANGE

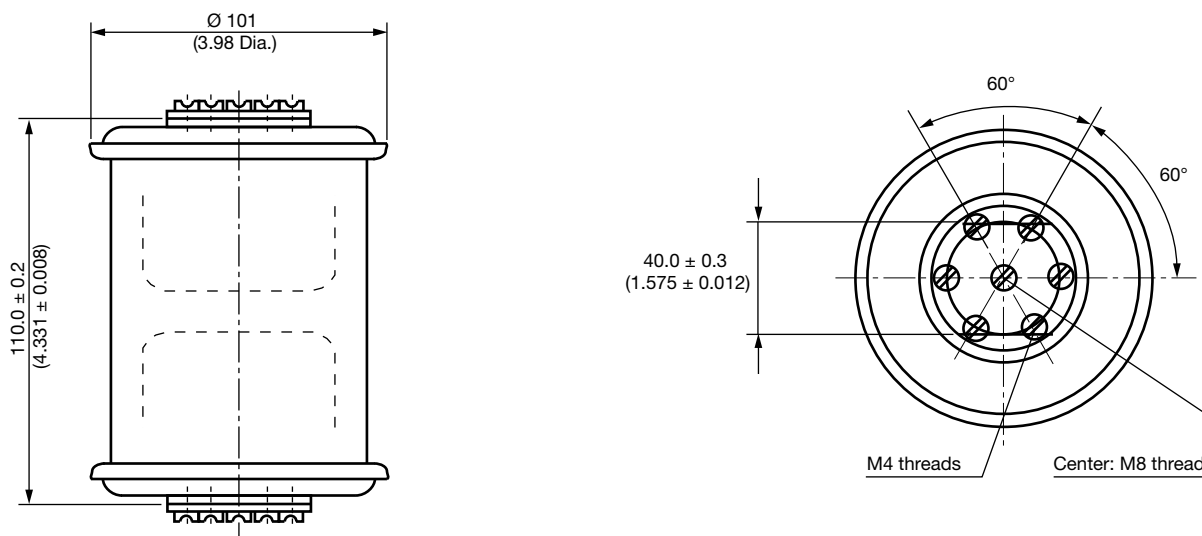
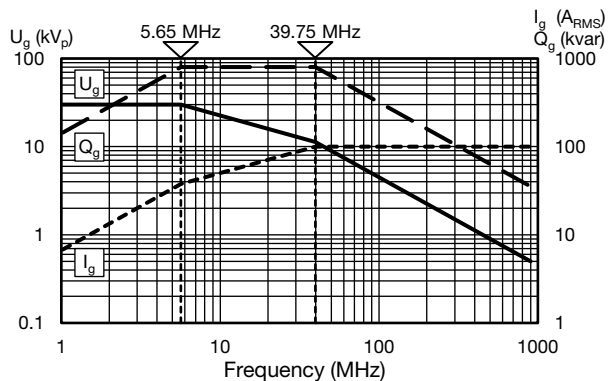
-55 °C to +100 °C

**SAP PART NUMBER AND ELECTRICAL DATA**

PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV <sub>p</sub> )	RATED POWER <sup>(1)</sup> (kvar)	RATED CURRENT (A <sub>RMS</sub> )
BZ100110WV50036CB1	R16 High Q	50	30	Up to 800	100

**Note**

(1) The surface temperature during operation must not exceed +100 °C

**DIMENSIONS** in millimeters (inches)

**DERATING DIAGRAM**

**RELATED DOCUMENTS**

General Information

[www.vishay.com/doc?22071](http://www.vishay.com/doc?22071)



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