

## RF Power Barrel Capacitors for Higher Voltages Class 1 Ceramic



QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Ceramic Class	1
Ceramic Dielectric	R230
Type	TOSZ 114096
Voltage ( $V_p$ )	40 000
Min. Capacitance (pF)	1000
Max. Capacitance (pF)	1000
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: 1/4-20 UNC thread 6.9 Nm (61.5 lbf in)  
8-32 UNC thread 1.8 Nm (16.2 lbf in)

### FINISH

Capacitor body completely protective lacquered.

### MARKING

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

### FEATURES

- High voltage and power rating
- Low inner inductance allows operation to high frequency

### APPLICATIONS

Filter, bypass and coupling circuits

### CAPACITANCE RANGE

1000 pF

### CAPACITANCE TOLERANCE

± 20 %

### CERAMIC DIELECTRICS

R230 (TCC - 750 ppm/K)

### RATED VOLTAGE

40 kV<sub>p</sub>

### DIELECTRIC STRENGTH TEST

60 000 V<sub>DC</sub> (2 minutes)  
30 000 V<sub>RMS</sub> (50 Hz, 3 minutes)

### DISSIPATION FACTOR

Max. 0.05 % (300 kHz or 100 kHz)

### INSULATION RESISTANCE

Min. 100 000 MΩ (at 25 °C)

### OPERATING TEMPERATURE RANGE

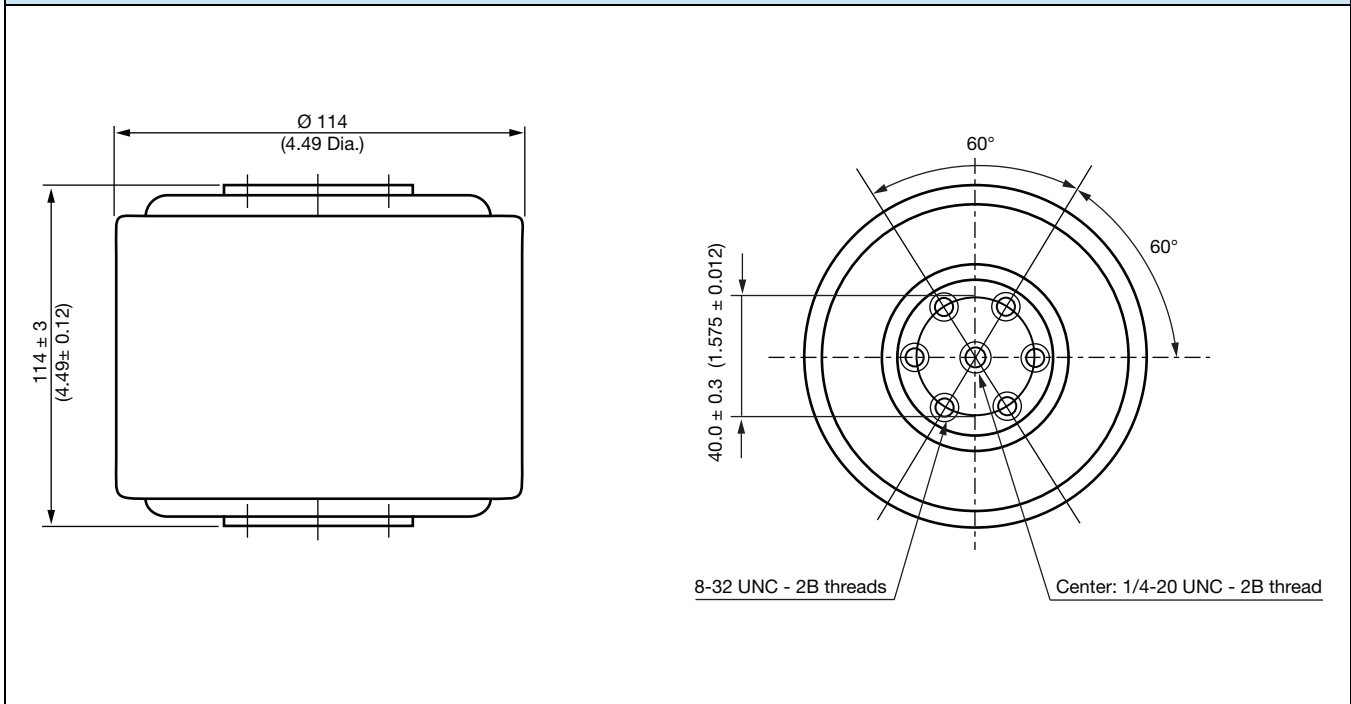
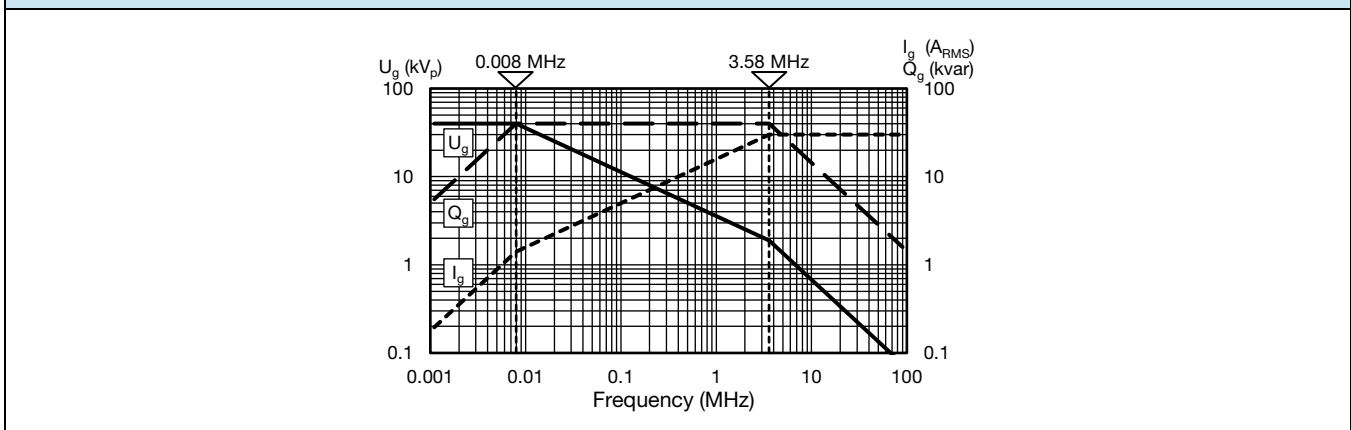
-55 °C to +100 °C

**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> )
BZ114096WZ10238BK1	R230	1000	40	40	30

**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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