

## RF Power Pot Capacitors with Mounting Tags or Screw Terminals, Class 1 Ceramic



QUICK REFERENCE DATA		
DESCRIPTION	VALUE	
Ceramic Class	1	
Ceramic Dielectric	R7, R16, R42, R85	
Type	TA 030090 TB 030090 TD 030090 TDZ 030090 TE 030090	
Voltage ( $V_p$ )	9000	10 000
Min. Capacitance (pF)	1200	50
Max. Capacitance (pF)	1600	1000
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 rim is additionally glazed.

### MARKING

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

### FEATURES

- High reliability
- Multiple terminals
- Wide range of capacitance values

### APPLICATIONS

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

### CAPACITANCE RANGE

50 pF to 1.6 nF

### CAPACITANCE TOLERANCE

$\pm 20\%$ ;  $\pm 10\%$ ;  $\pm 5\%$

### CERAMIC DIELECTRICS

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

### RATED VOLTAGE

- 9.0 kV<sub>p</sub>
- 10.0 kV<sub>p</sub>

### DIELECTRIC STRENGTH TEST

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

### DISSIPATION FACTOR

R7: max. 0.07 %  
R16: max. 0.04 %  
R42, R85: max. 0.05 %

Measuring frequencies:  
1 MHz (< 1 nF); 300 kHz or 100 kHz ( $\geq 1$  nF)

### INSULATION RESISTANCE

Min. 100 000 M $\Omega$  (at 25 °C)

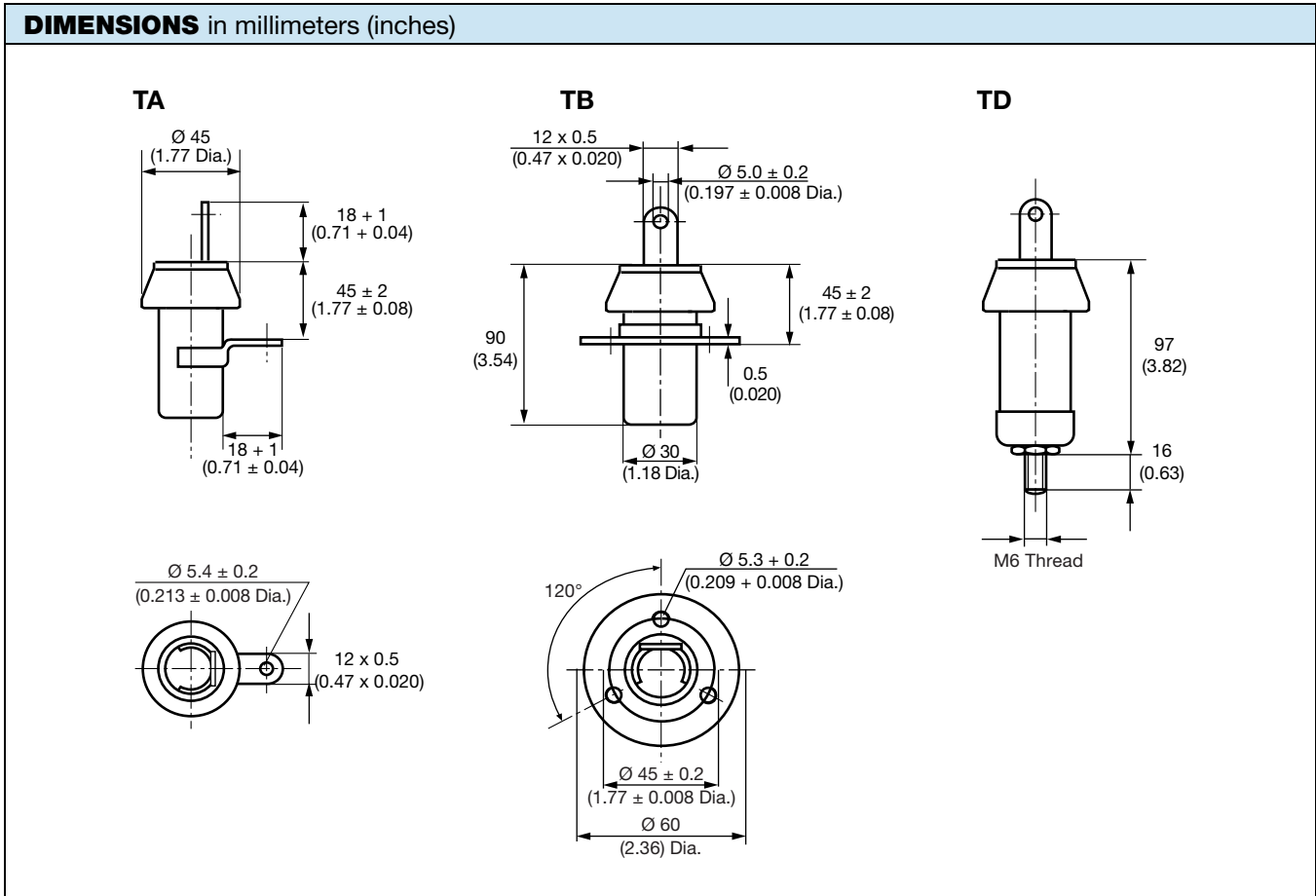
### OPERATING TEMPERATURE RANGE

-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> )	
T#030090BH500##BF1	R7	50	10	14	9.0	
T#030090BH600##BF1		60				
T#030090BH800##BF1		80				
T#030090BH101##BG1	R16	100				
T#030090BH121##BG1		120				
T#030090BH161##BG1		160				
T#030090BH201##BH1	R42	200				
T#030090BH251##BH1		250				
T#030090BH301##BH1		300				
T#030090BH401##BH1		400				
T#030090BH501##BJ1	R85	500		9.0		18
T#030090BH601##BJ1		600				
T#030090BH801##BJ1		800				
T#030090BH102##BJ1		1000				
T#030090WC122##BJ1		1200				
T#030090WC162##BJ1		1600				

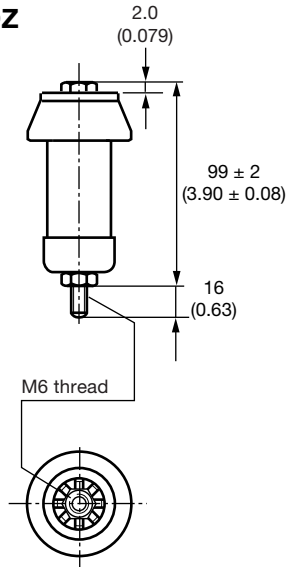
**Notes**

- # 2<sup>nd</sup> digit: code letter of the terminal version A, B, D, E (exception: TDZ30090)
  - ## 14<sup>th</sup> to 15<sup>th</sup> digit: capacitance tolerance code  $\pm 20\%$  = 38,  $\pm 10\%$  = 36,  $\pm 5\%$  = 33
- (1) The surface temperature during operation must not exceed +100 °C

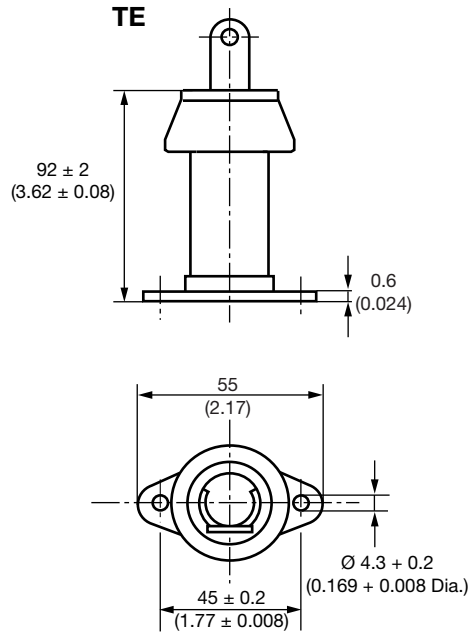


**DIMENSIONS** in millimeters (inches)

**TDZ**

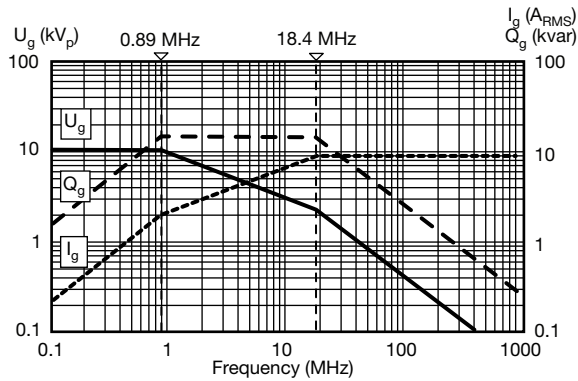


**TE**

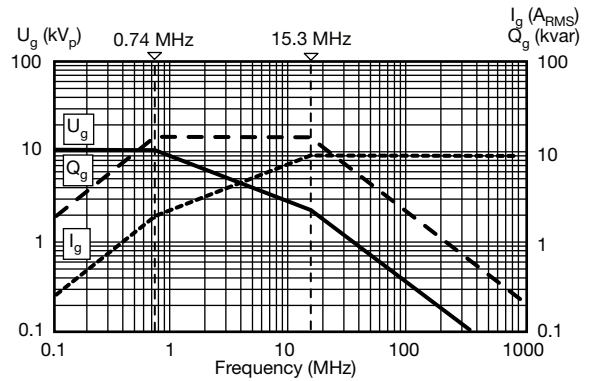


**DERATING DIAGRAMS**

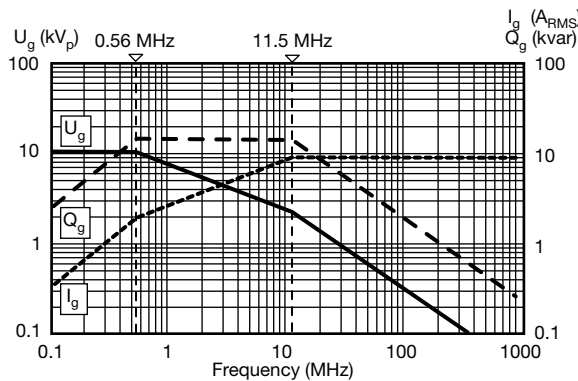
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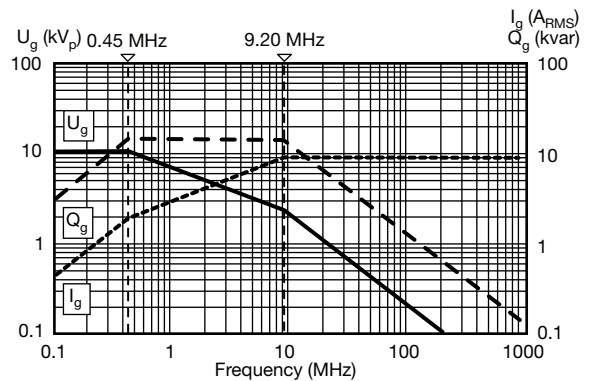
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**T#030090BH800##BF1**

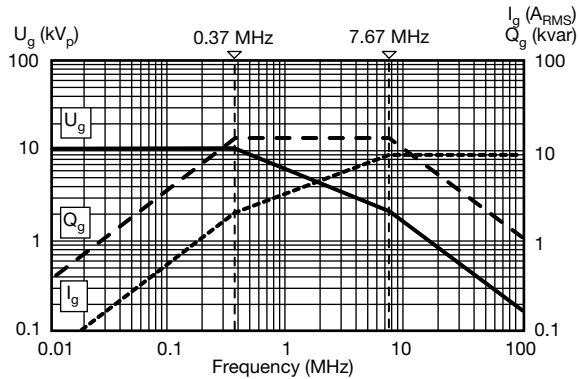


**T#030090BH101##BG1**

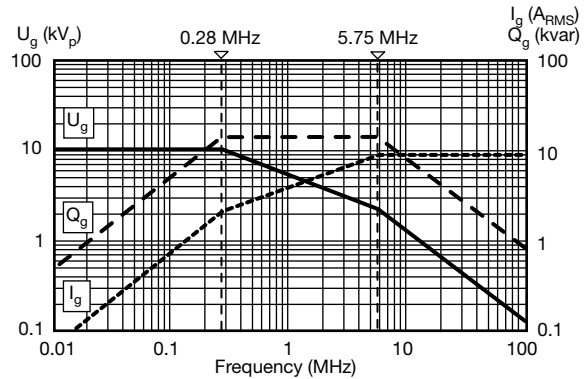


**DERATING DIAGRAMS**

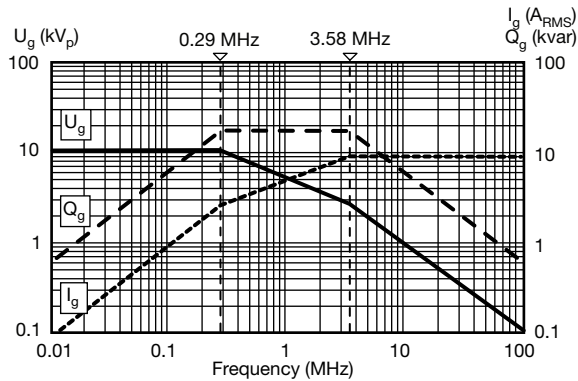
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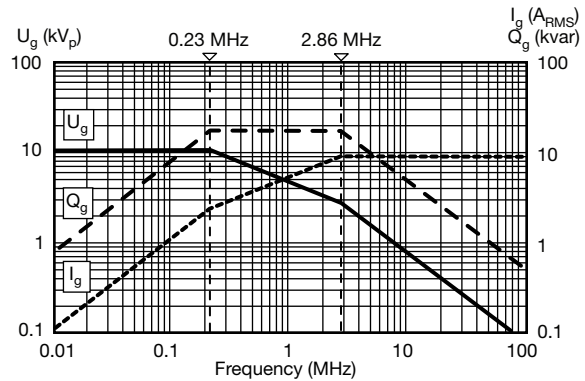
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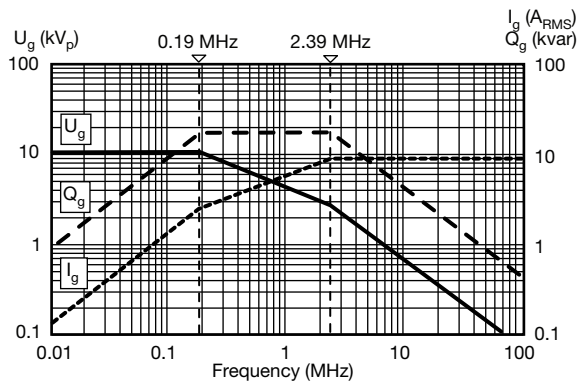
**T#030090BH201##BH1**



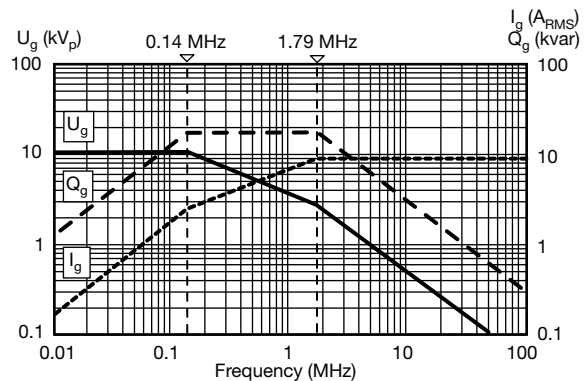
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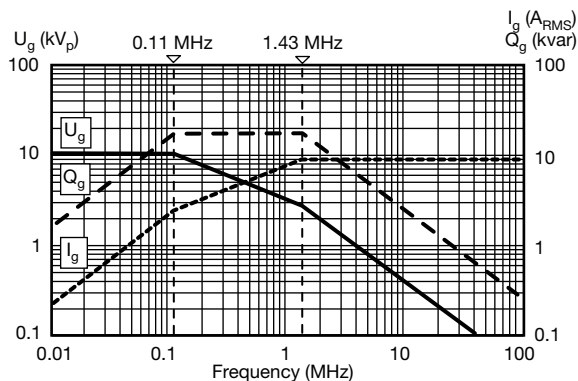
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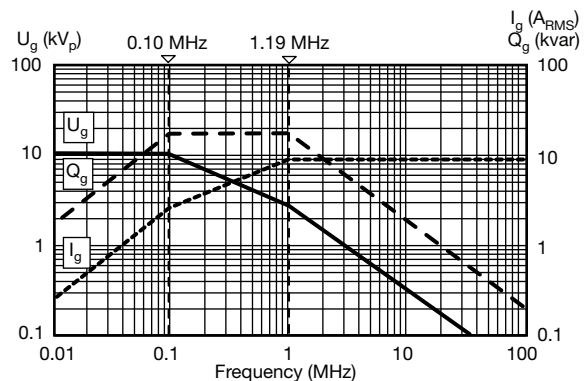
**T#030090BH401##BH1**



**T#030090BH501##BJ1**

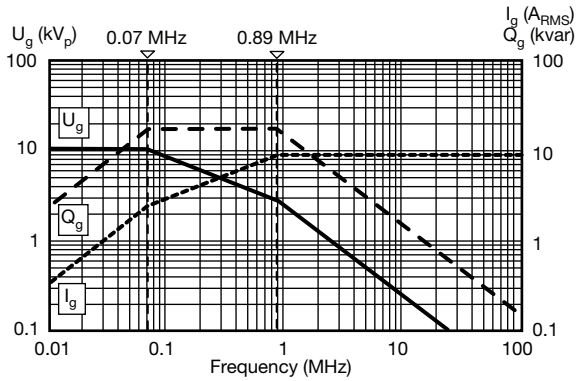


**T#030090BH601##BJ1**

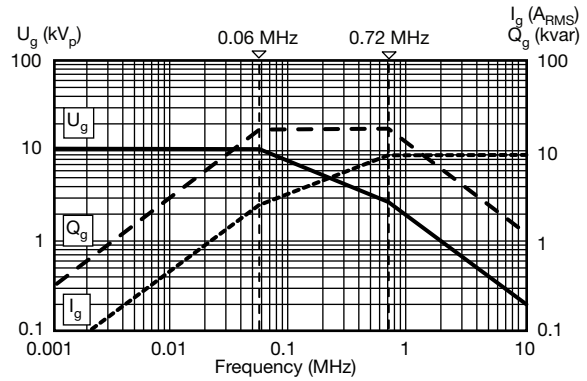


**DERATING DIAGRAMS**

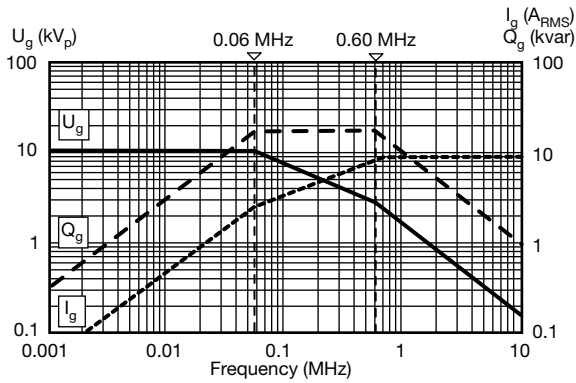
T#030090BH801##BJ1



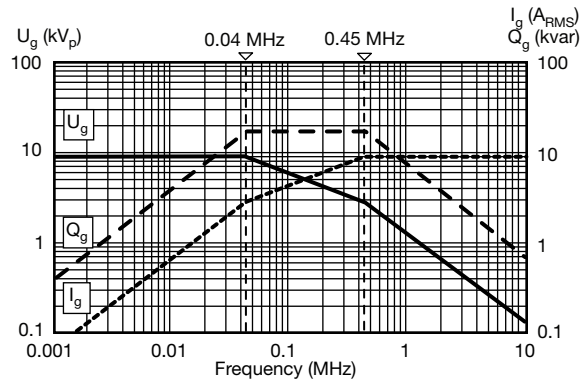
T#030090BH102##BJ1



T#030090WC122##BJ1



T#030090WC162##BJ1



**RELATED DOCUMENTS**

General Information

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



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