

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



### FEATURES

- High reliability
- Multiple terminals
- High capacitance values

### APPLICATIONS

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

QUICK REFERENCE DATA								
DESCRIPTION	VALUE							
Ceramic Class	1							
Ceramic Dielectric	R85							
Type	TB 050120, TE 050120				TB 050200, TE 050200			
Voltage ( $V_p$ )	6000	9000	10 000	12 000	6000	9000	10 000	12 000
Min. Capacitance (pF)	3000	2500	1600	1000	6000	5000	3000	2000
Max. Capacitance (pF)	4000	2500	2000	1200	6000	5000	4000	2500
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.

### CAPACITANCE RANGE

1.0 nF to 6.0 nF

### CAPACITANCE TOLERANCE

± 20 %; ± 10 %; ± 5 %

### CERAMIC DIELECTRICS

R85 (TCC - 750 ppm/K)

### RATED VOLTAGE

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

### DIELECTRIC STRENGTH TEST

200 % of rated AC voltage (50 Hz, 5 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> )
<b>TYPE T. 050120</b>					
T#050120WF102##BJ1	R85	1000	12	60	20
T#050120WF122##BJ1		1200			
T#050120BH162##BJ1		1600	10		
T#050120BH202##BJ1		2000			
T#050120WC252##BJ1		2500	9.0		
T#050120BF302##BJ1		3000	6.0		
T#050120BF402##BJ1		4000			
<b>TYPE T. 050200</b>					
T#050200WF202##BJ1	R85	2000	12	70	20
T#050200WF252##BJ1		2500			
T#050200BH302##BJ1		3000	10		
T#050200BH402##BJ1		4000			
T#050200WC502##BJ1		5000	9.0		
T#050200BF602##BJ1		6000	6.0		

**Notes**

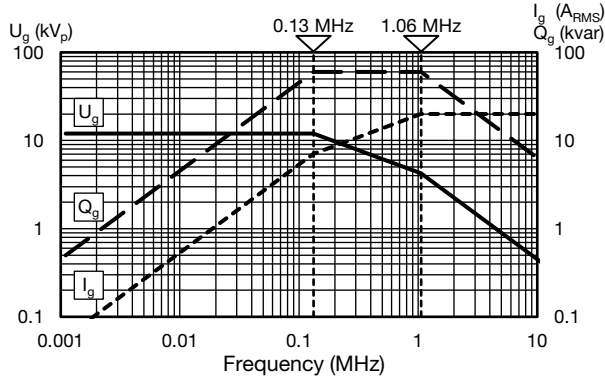
- # 2<sup>nd</sup> digit: code letter of the terminal version B, E
- ## 14<sup>th</sup> to 15<sup>th</sup> digit: capacitance tolerance code  $\pm 20\% = 38, \pm 10\% = 36, \pm 5\% = 33$
- <sup>(1)</sup> The surface temperature during operation must not exceed +100 °C

DIMENSIONS in millimeters (inches)		
<b>TB</b>		
<b>TE</b>		
<b>TYPE</b>	<b>T. 050120</b>	<b>T. 050200</b>
Length L <sub>1</sub>	120 (4.72)	200 (7.87)
Length L <sub>2</sub>	60 ± 2 (2.36 ± 0.08)	100 ± 2 (3.94 ± 0.08)
Length L <sub>3</sub>	125 ± 2 (4.92 ± 0.08)	205 ± 2 (8.07 ± 0.08)

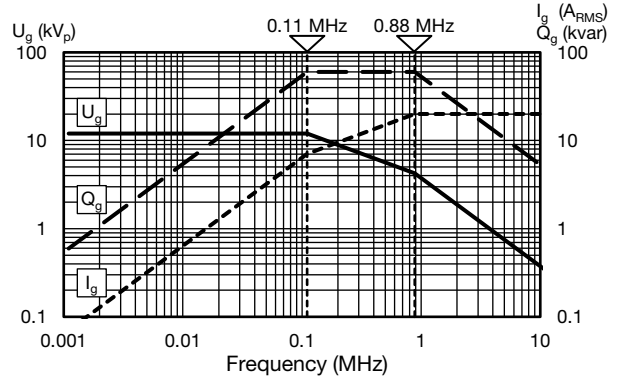


DERATING DIAGRAMS

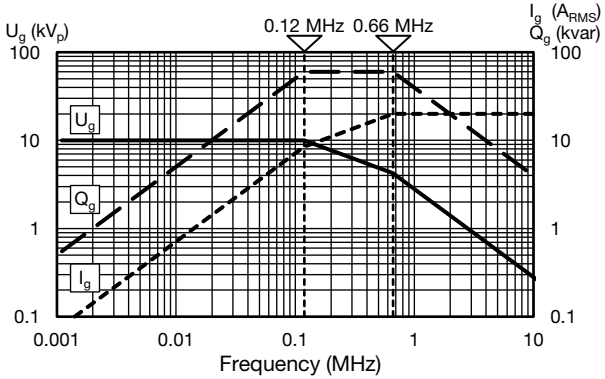
T#050120WF102##BJ1



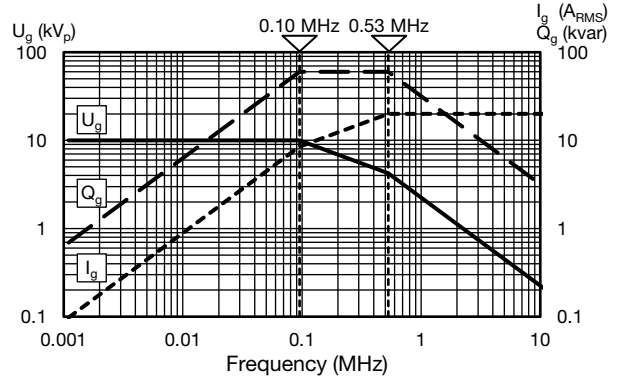
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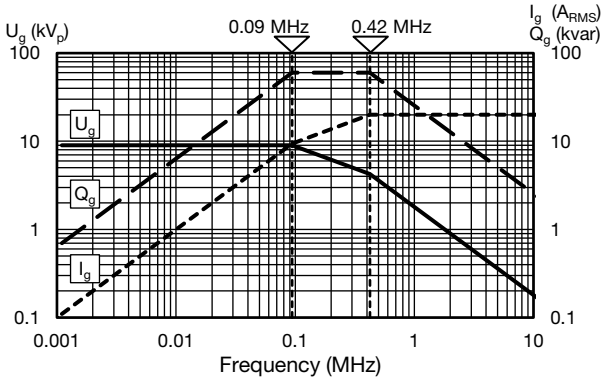
T#050120BH162##BJ1



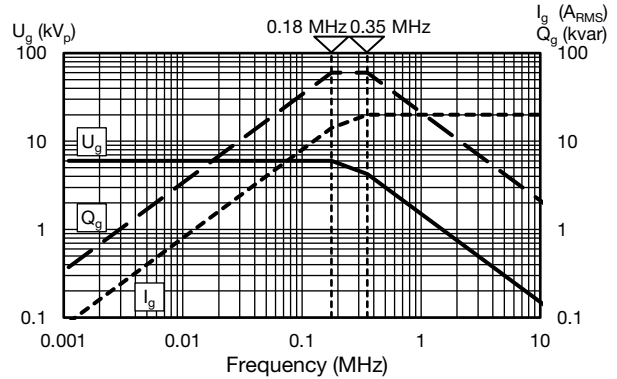
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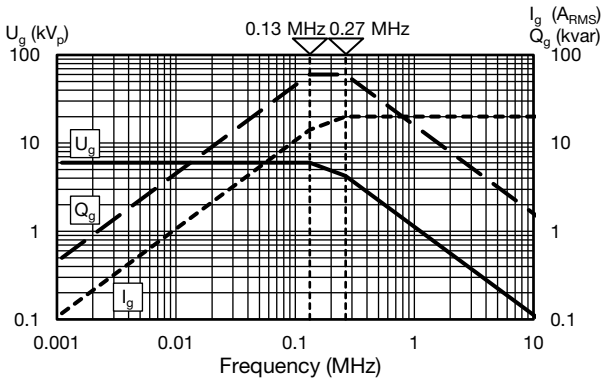
T#050120WC252##BJ1



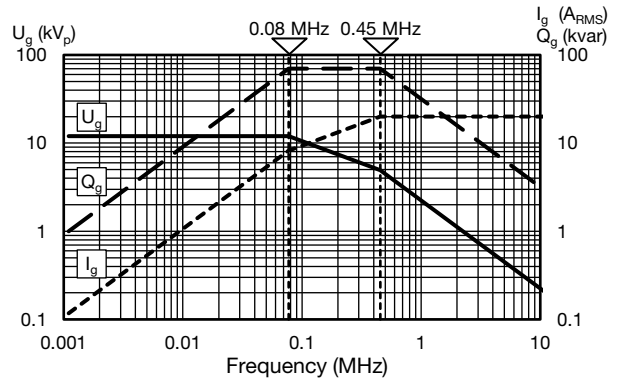
T#050120BF302##BJ1

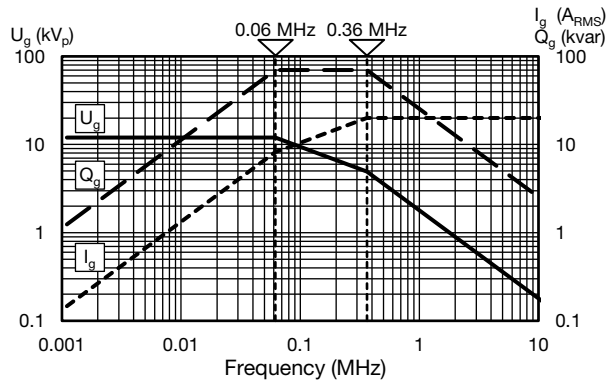
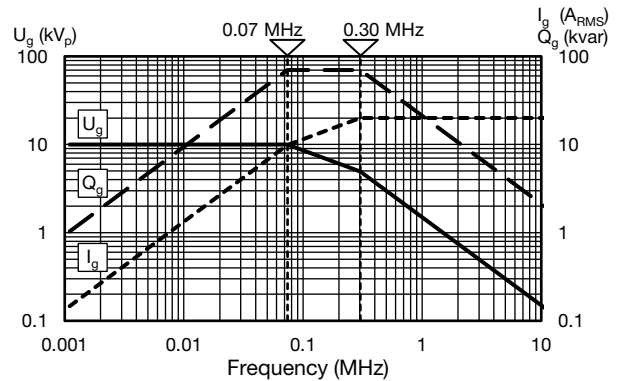
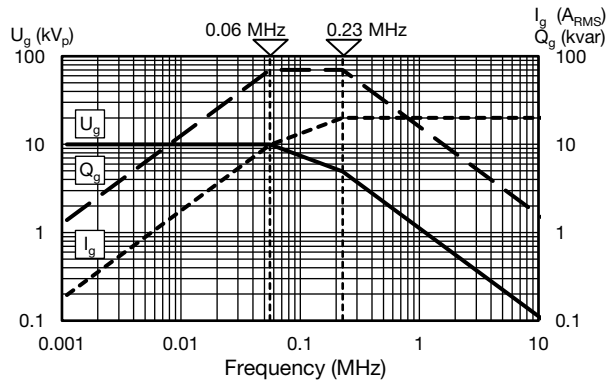
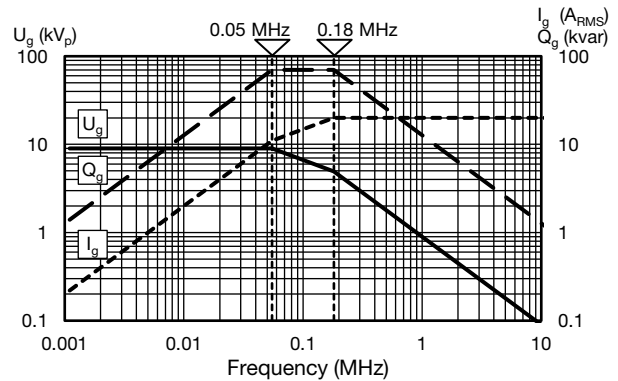
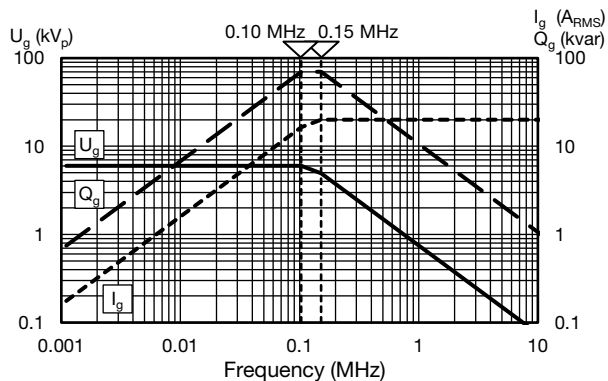


T#050120BF402##BJ1



T#050200WF202##BJ1



**DERATING DIAGRAMS**
**T#050200WF252##BJ1**

**T#050200BH302##BJ1**

**T#050200BH402##BJ1**

**T#050200WC502##BJ1**

**T#050200BF602##BJ1**

**RELATED DOCUMENTS**

General Information

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



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