

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	TD 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
- 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

± 20 %; ± 10 %; ± 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_p
- 10.0 kV_p

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 (≥ 1 nF)

INSULATION RESISTANCE

Min. 100 000 MΩ (at 25 °C)

OPERATING TEMPERATURE RANGE

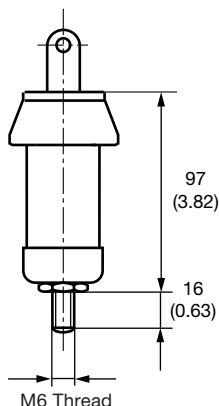
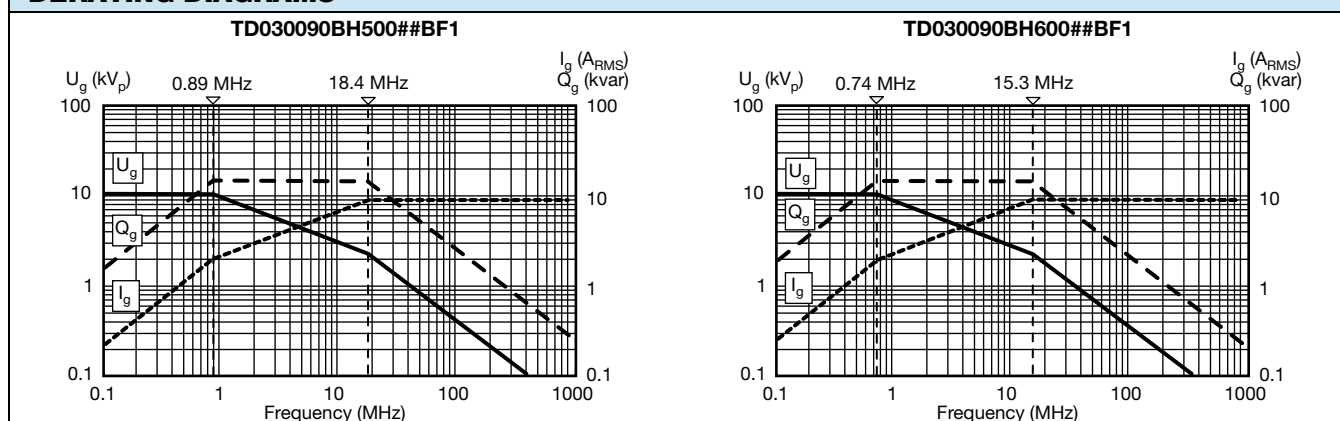
-55 °C to +100 °C

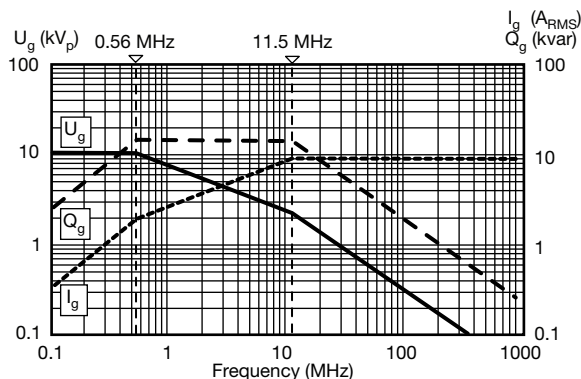
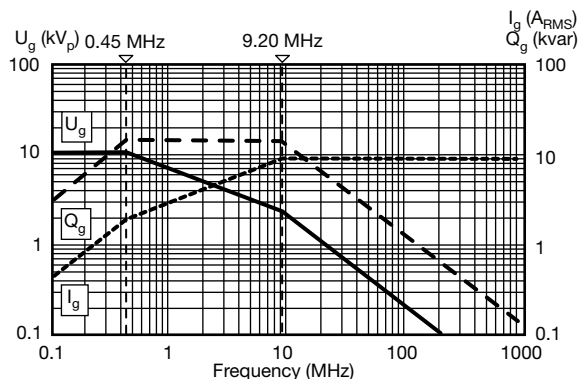
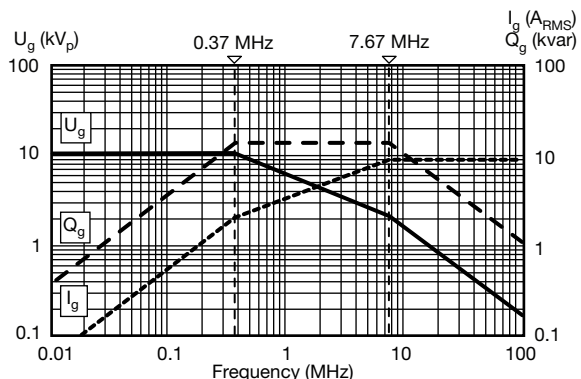
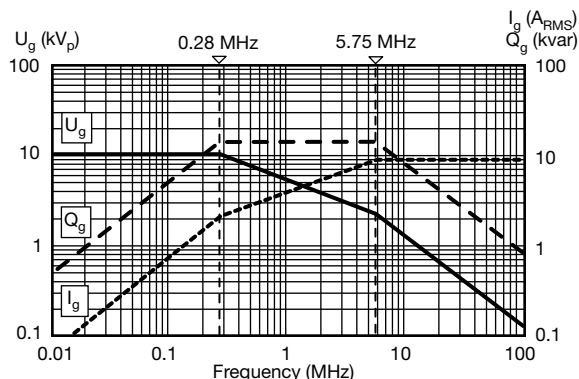
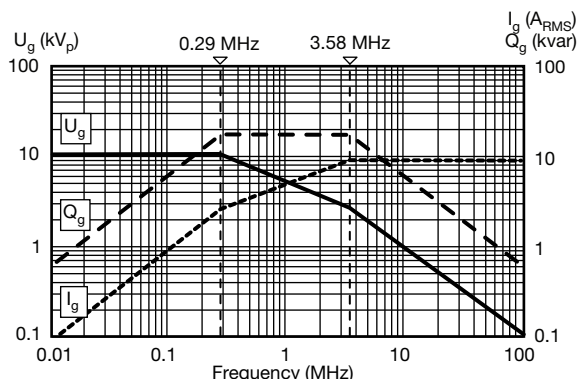
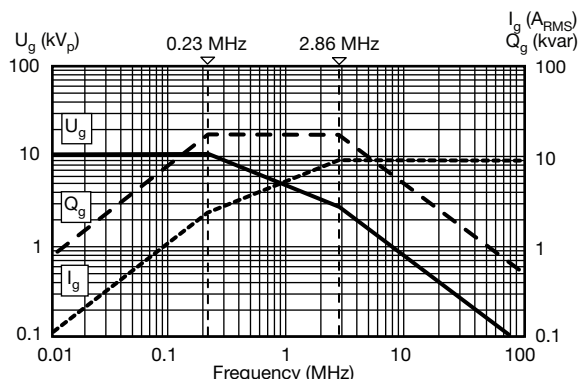
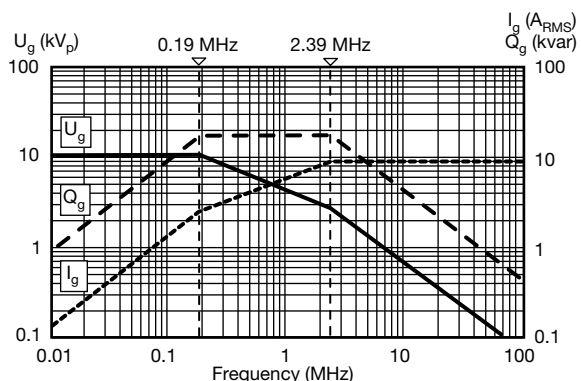
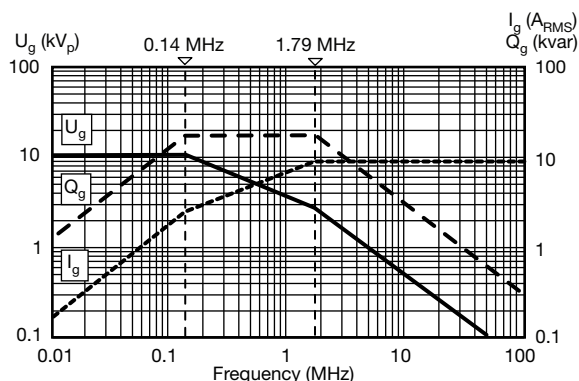
SAP PART NUMBER AND ELECTRICAL DATA

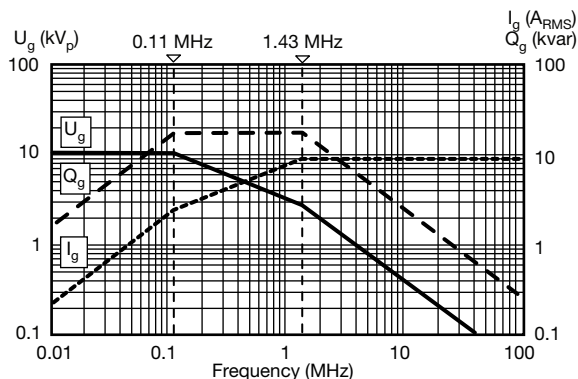
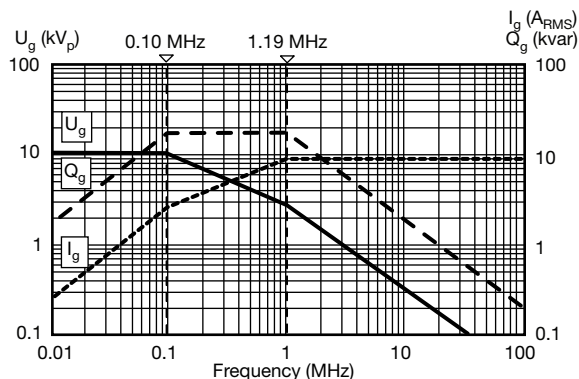
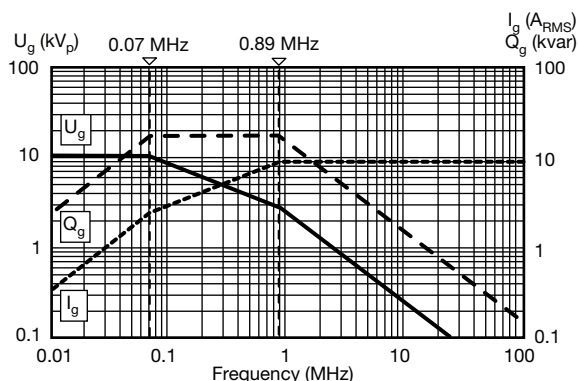
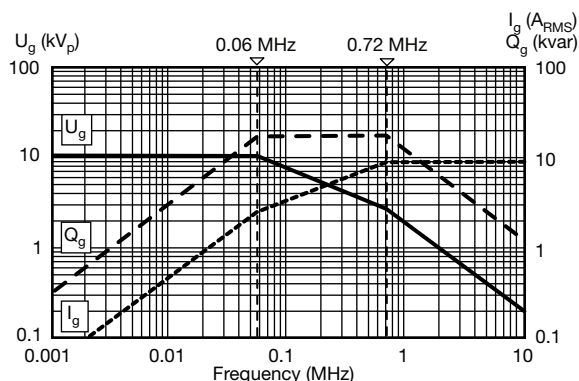
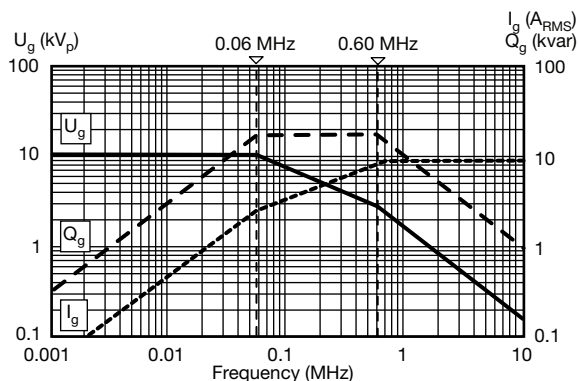
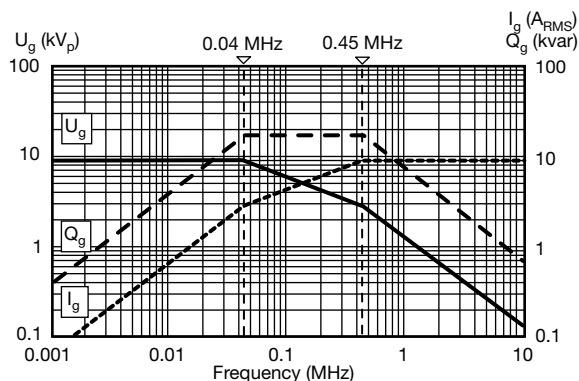
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _p)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})	
TD030090BH500##BF1	R7	50	10	14	9.0	
TD030090BH600##BF1		60				
TD030090BH800##BF1		80				
TD030090BH101##BG1	R16	100				
TD030090BH121##BG1		120				
TD030090BH161##BG1		160				
TD030090BH201##BH1	R42	200		18		
TD030090BH251##BH1		250				
TD030090BH301##BH1		300				
TD030090BH401##BH1		400				
TD030090BH501##BJ1	R85	500				9.0
TD030090BH601##BJ1		600				
TD030090BH801##BJ1		800				
TD030090BH102##BJ1		1000				
TD030090WC122##BJ1		1200				
TD030090WC162##BJ1		1600				

Notes

- ## 14th to 15th 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)

DERATING DIAGRAMS


DERATING DIAGRAMS
TD030090BH800##BF1

TD030090BH101##BG1

TD030090BH121##BG1

TD030090BH161##BG1

TD030090BH201##BH1

TD030090BH251##BH1

TD030090BH301##BH1

TD030090BH401##BH1


DERATING DIAGRAMS
TD030090BH501##BJ1

TD030090BH601##BJ1

TD030090BH801##BJ1

TD030090BH102##BJ1

TD030090WC122##BJ1

TD030090WC162##BJ1

RELATED DOCUMENTS

General Information

www.vishay.com/doc?22071



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