

RF Power Tubular Capacitors with Screw Terminals and Mounting Tags, Class 1 Ceramic



QUICK REFERENCE DATA				
DESCRIPTION	VALUE			
Ceramic Class	1			
Ceramic Dielectric	R7, R16, R42, R85	R16, R42, R85, R230		
Type	RD 030100		RD 045120	
Voltage (V _p)	7000	8000	10 000	11 000
Min. Capacitance (pF)	1500	100	800	200
Max. Capacitance (pF)	1500	1200	4700	3000
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 rims are additionally glazed.

MARKING

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

ACCESSORIES ADDED

All capacitors are supplied with the necessary Hex. nuts and washers to make the connection to the conductor rod.

FEATURES

- High voltage ratings
- High reliability
- Wide range of capacitance values

APPLICATIONS

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

CAPACITANCE RANGE

100 pF to 4.7 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)
- R230 (TCC - 750 ppm/K)

RATED VOLTAGE

- 7.0 kV_p
- 8.0 kV_p
- 10 kV_p
- 11 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, R230: 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



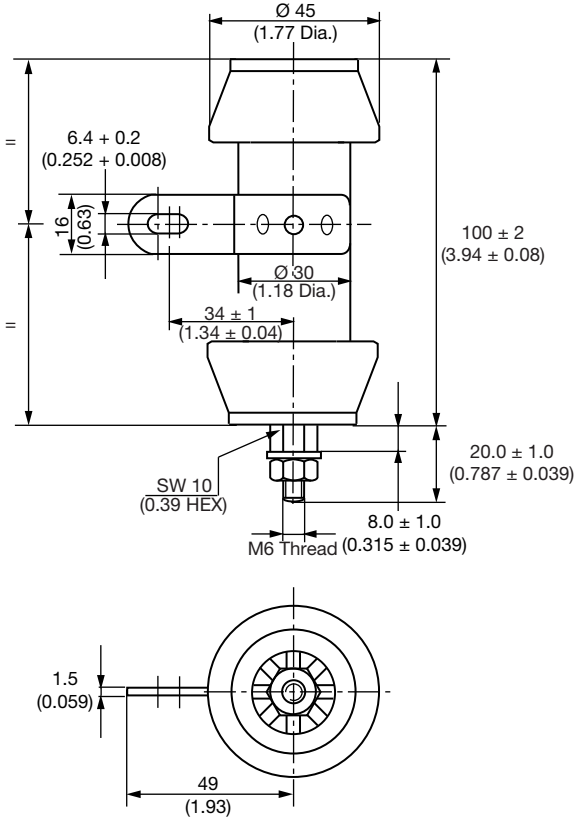
SAP PART NUMBER AND ELECTRICAL DATA						
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _p)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})	
TYPE RD 030100						
RD030100BP101##BF1	R7	100	8.0	30	30	
RD030100BP121##BG1	R16	120				
RD030100BP161##BG1		160				
RD030100BP201##BG1		200				
RD030100BP251##BH1		R42				250
RD030100BP301##BH1	300					
RD030100BP401##BH1	400					
RD030100BP501##BH1	500					
RD030100BP601##BJ1	R85	600				7.0
RD030100BP801##BJ1		800				
RD030100BP102##BJ1		1000				
RD030100BP122##BJ1		1200				
RD030100VY152##BJ1		1500				
TYPE RD 045120						
RD045120WE201##BG1	R16	200	11	60	50	
RD045120WE251##BG1		250				
RD045120WE301##BG1		300				
RD045120WE401##BH1	R42	400				
RD045120WE501##BH1		500				
RD045120WE601##BH1		600				
RD045120BH801##BH1		800	10			
RD045120WE102##BJ1	R85	1000	11			
RD045120WE122##BJ1		1200	10			
RD045120BH152##BJ1		1500	10			
RD045120WE202##BK1		R230	2000			11
RD045120WE302##BK1	3000		10			
RD045120BH472##BK1	4700		10			

Notes

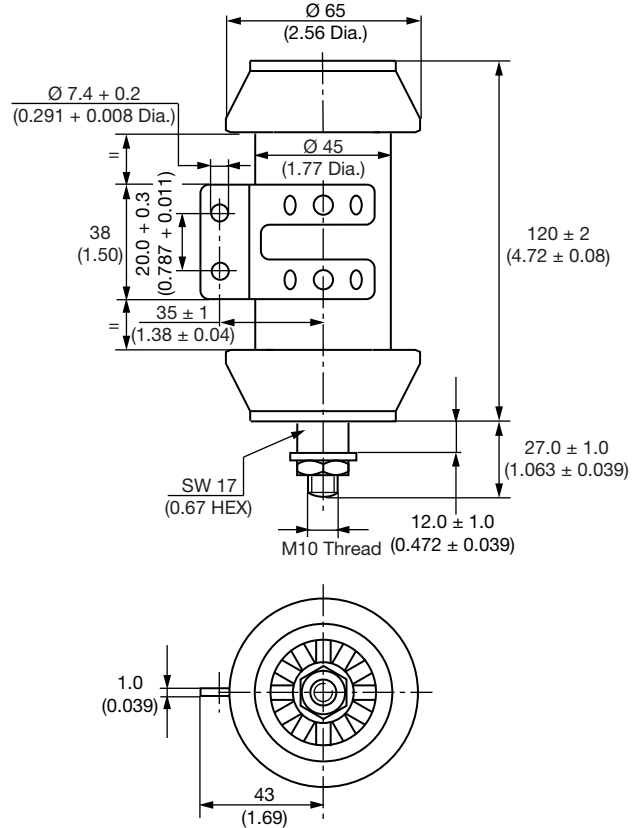
- ## 14th to 15th digit: capacitance tolerance code ± 20 % = 38, ± 10 % = 36, ± 5 % = 33
- (1) The surface temperature during operation must not exceed +100 °C

DIMENSIONS in millimeters (inches)

RD 030100

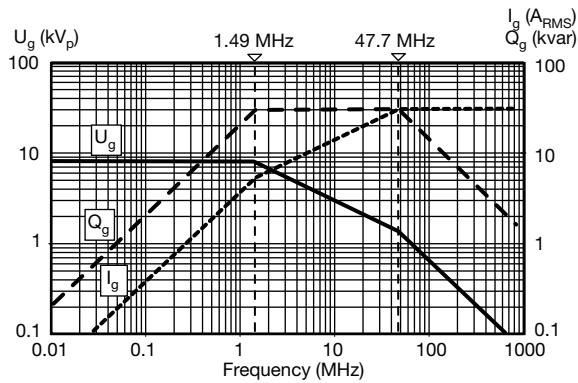


RD 045120

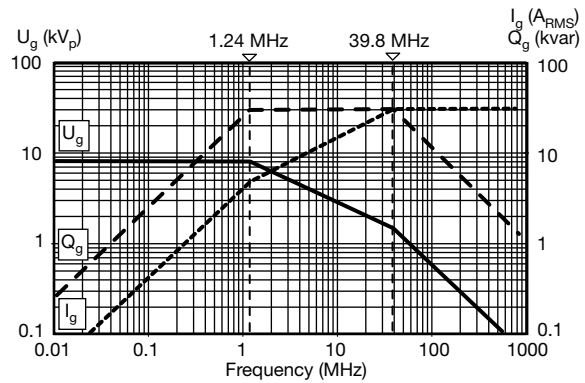


DERATING DIAGRAMS

RD030100BP101##BF1



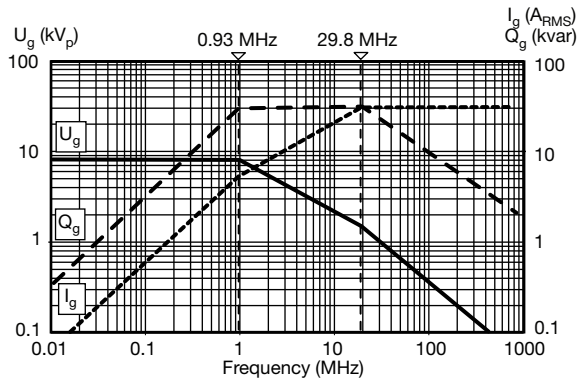
RD030100BP121##BG1



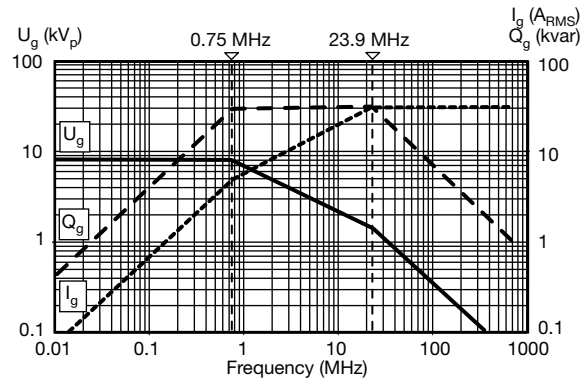


DERATING DIAGRAMS

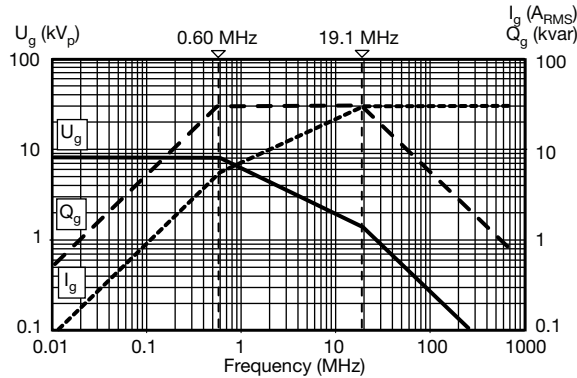
RD030100BP161##BG1



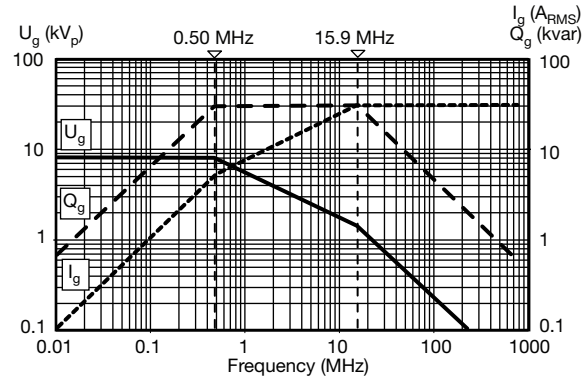
RD030100BP201##BG1



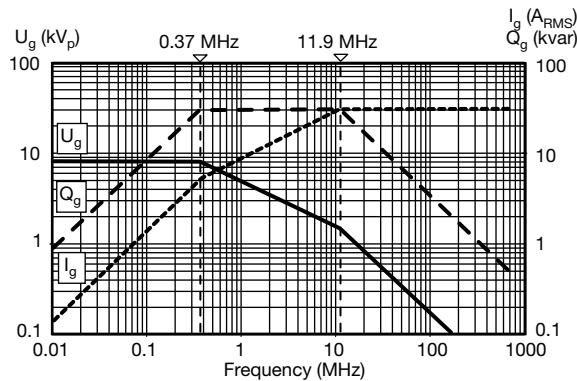
RD030100BP251##BH1



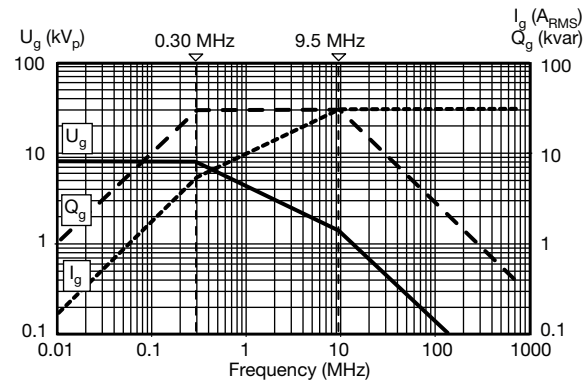
RD030100BP301##BH1



RD030100BP401##BH1



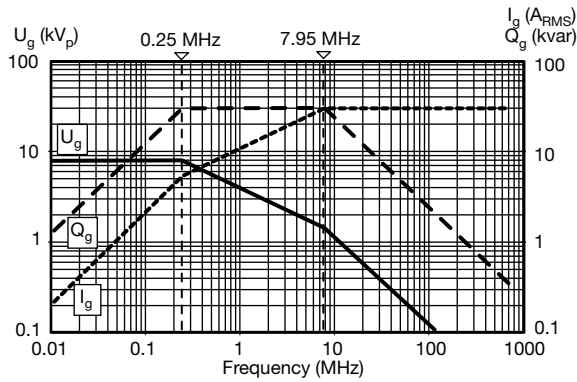
RD030100BP501##BH1



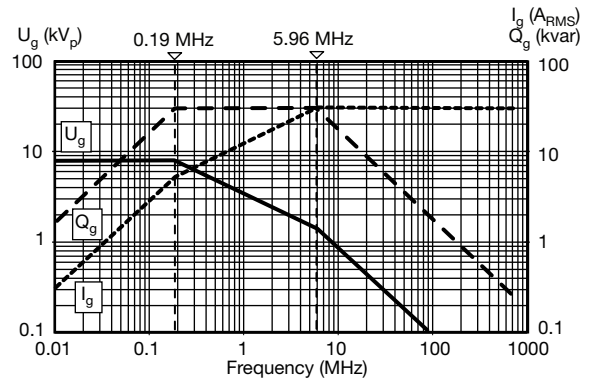


DERATING DIAGRAMS

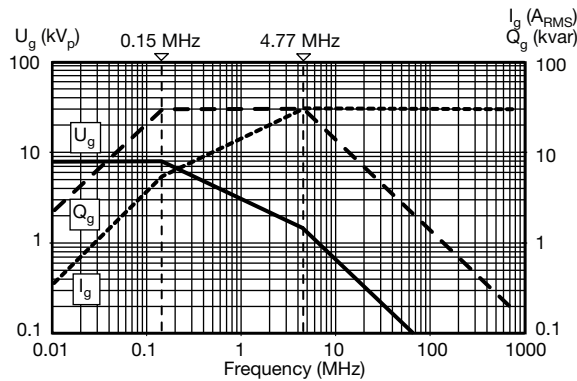
RD030100BP601##BJ1



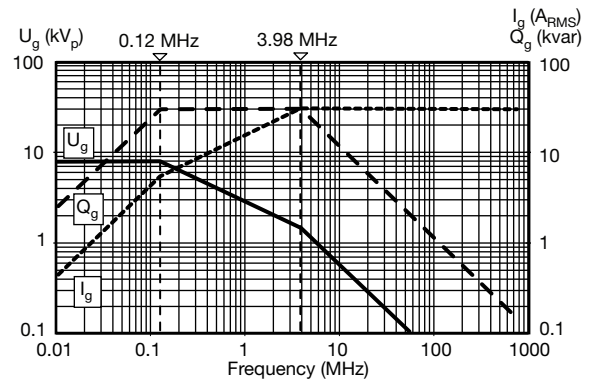
RD030100BP801##BJ1



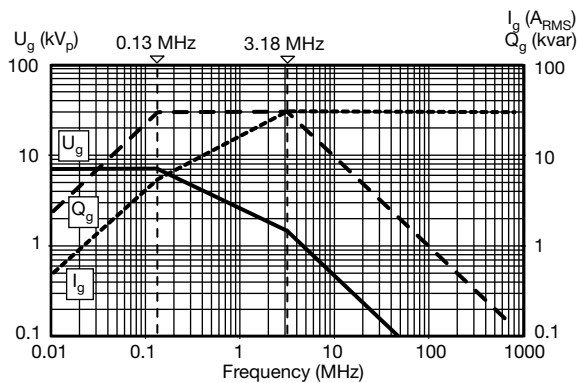
RD030100BP102##BJ1



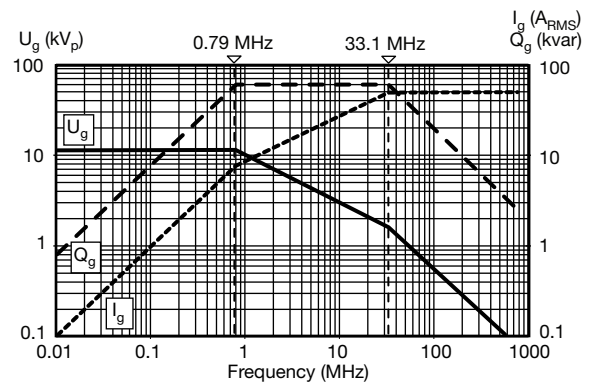
RD030100BP122##BJ1



RD030100VY152##BJ1



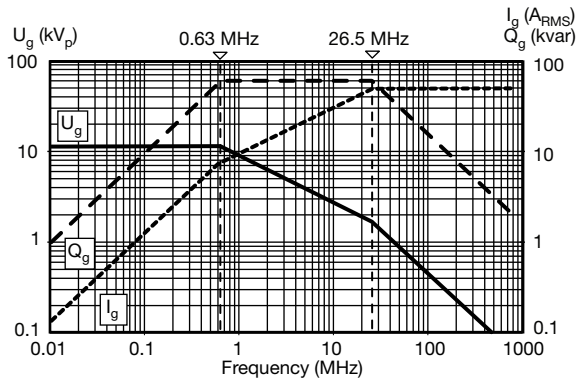
RD045120WE201##BG1



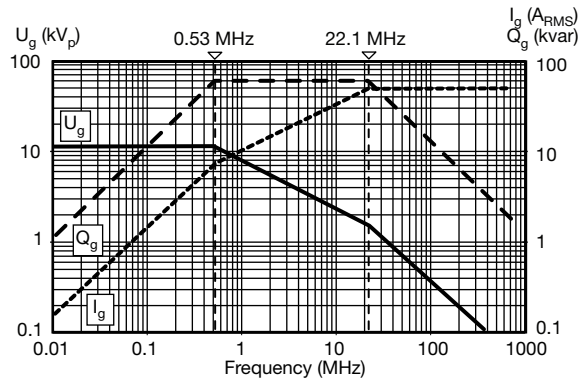


DERATING DIAGRAMS

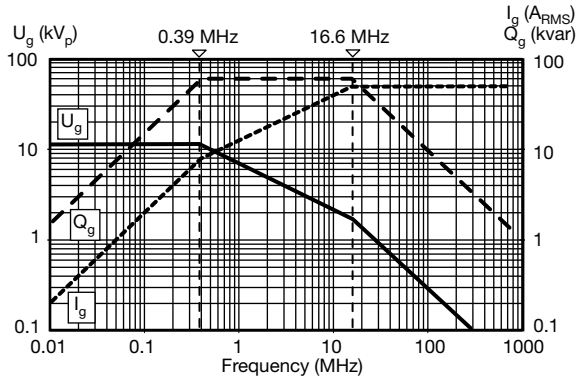
RD045120WE251##BG1



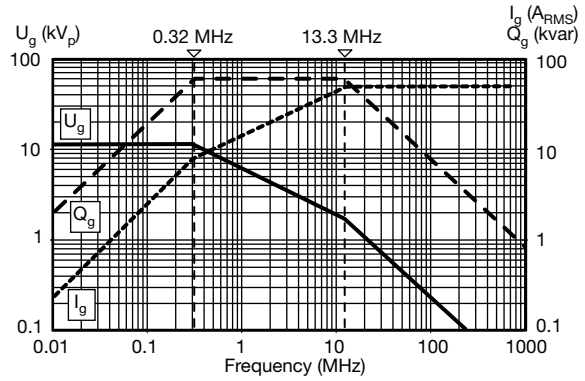
RD045120WE301##BG1



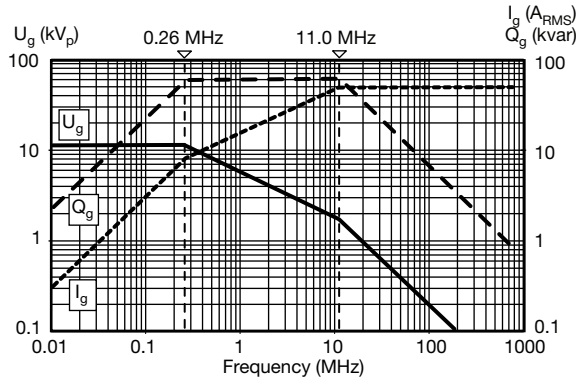
RD045120WE401##BH1



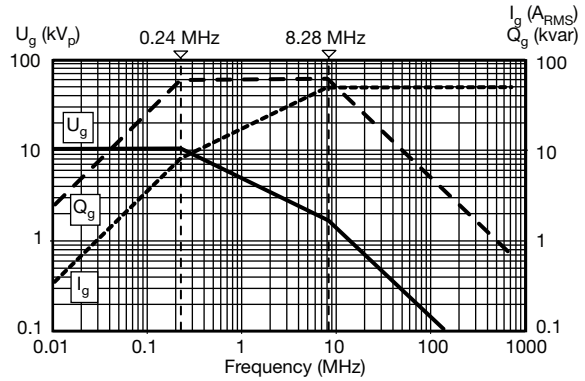
RD045120WE501##BH1



RD045120WE601##BH1

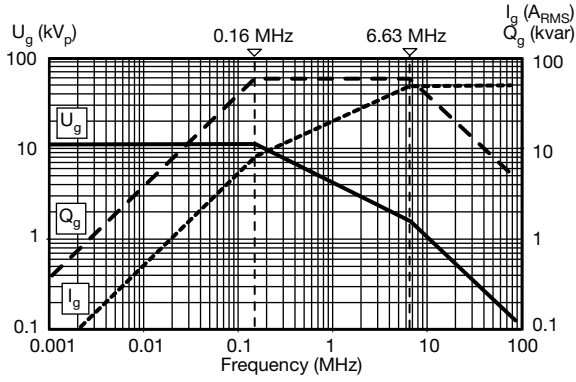


RD045120BH801##BH1

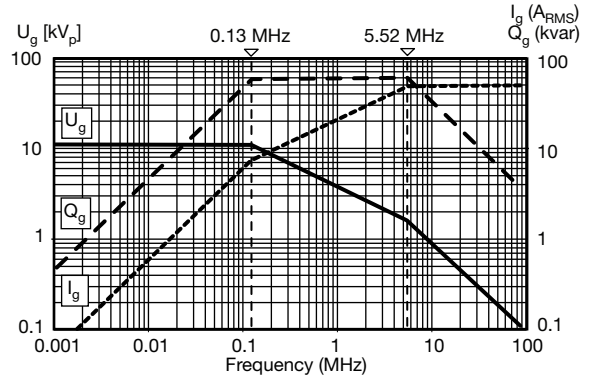


DERATING DIAGRAMS

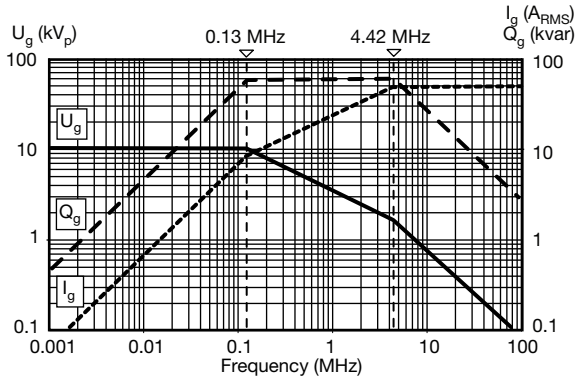
RD045120WE102##BJ1



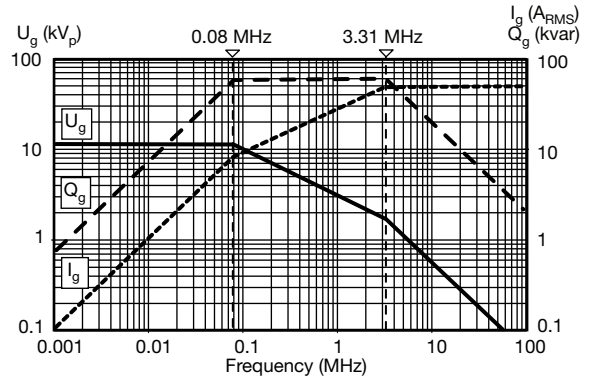
RD045120WE122##BJ1



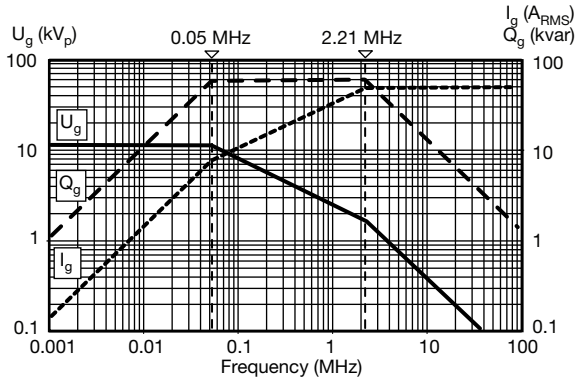
RD045120BH152##BJ1



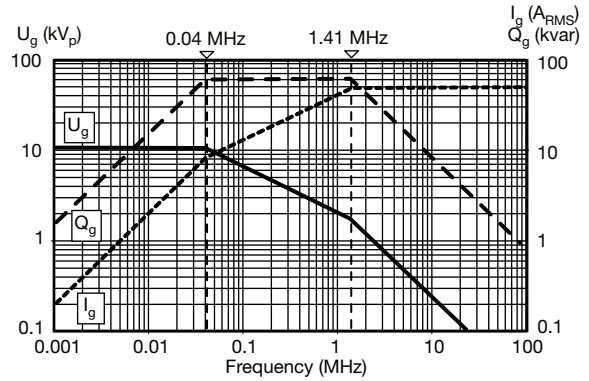
RD045120WE202##BK1



RD045120WE302##BK1



RD045120BH472##BK1



RELATED DOCUMENTS

General Information

www.vishay.com/doc?22071



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