RF Power Pot Capacitors with Mounting Tags, Class 1 Ceramic

FEATURES

- Small size
- High reliability
- Wide range of capacitance values

APPLICATIONS

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

QUICK REFERENCE DATA							
DESCRIPTION	VALUE						
Ceramic Class	1						
Ceramic Dielectric	R7, R16, R42, R85						
Type	TA 020030, TB 020030, TD 020030, TE 020030			TA 020050, TB 020050, TD 020050, TE 020050		TA 020080, TB 020080, TD 020080, TE 020080	
Voltage (V_p)	6000	7000	8000	7000	8000	7000	8000
Min. Capacitance (pF)	100	80	10	200	20	1200	40
Max. Capacitance (pF)	400	250	160	600	500	1200	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.

CAPACITANCE RANGE

10 pF to 1.2 nF

CAPACITANCE TOLERANCE

± 20 %; ± 10 %; ± 5 %

DIELECTRIC STRENGTH TEST

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

CERAMIC DIELECTRICS

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

RATED VOLTAGE

- 6.0 kV_p
- 7.0 kV_p
- 8.0 kV_p

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

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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 T. 020030					
T#020030BP100##BF1	R7	10	8.0	3.5	6.0
T#020030BP160##BF1		16			
T#020030BP200##BF1		20			
T#020030BP250##BG1	R16	25			
T#020030BP400##BG1		40			
T#020030BP500##BH1	R42	50		4.2	
T#020030BP600##BH1		60			
T#020030VY800##BH1		80	7.0		
T#020030BF101##BH1		100	6.0		
T#020030BP121##BJ1	R85	120	8.0		
T#020030BP161##BJ1		160			
T#020030VY201##BJ1		200	7.0		
T#020030VY251##BJ1		250			
T#020030BF301##BJ1		300	6.0		
T#020030BF401##BJ1		400			
TYPE T. 020050					
T#020050BP200##BF1	R7	20	8.0	5.6	6.0
T#020050BP250##BF1		25			
T#020050BP400##BG1	R16	40			
T#020050BP500##BG1		50			
T#020050BP600##BG1		60			
T#020050BP800##BG1		80			
T#020050BP101##BH1	R42	100		7.0	
T#020050BP161##BH1		160			
T#020050VY201##BH1		200	7.0		
T#020050BP251##BJ1	R85	250	8.0		
T#020050BP301##BJ1		300			
T#020050BP401##BJ1		400			
T#020050BP501##BJ1		500			
T#020050VY601##BJ1		600	7.0		
TYPE T. 020080					
T#020080BP400##BF1	R7	40	8.0	8.5	7.0
T#020080BP600##BF1		60			
T#020080BP800##BG1	R16	80			
T#020080BP101##BG1		100			
T#020080BP121##BG1		120			
T#020080BP161##BG1		160			
T#020080BP201##BH1	R42	200		10.5	
T#020080BP251##BH1		250			
T#020080BP301##BH1		300			
T#020080BP401##BJ1	R85	400			
T#020080BP501##BJ1		500			
T#020080BP601##BJ1		600			
T#020080BP102##BJ1		1000			
T#020080VY122##BJ1		1200	7.0		

Notes

- # 2nd digit: code letter of the terminal version A, B, D, E
- ## 14th to 15th digit: capacitance tolerance code ± 20 % = 38, ± 10 % = 36, ± 5 % = 33

[1] The surface temperature during operation must not exceed +100 °C

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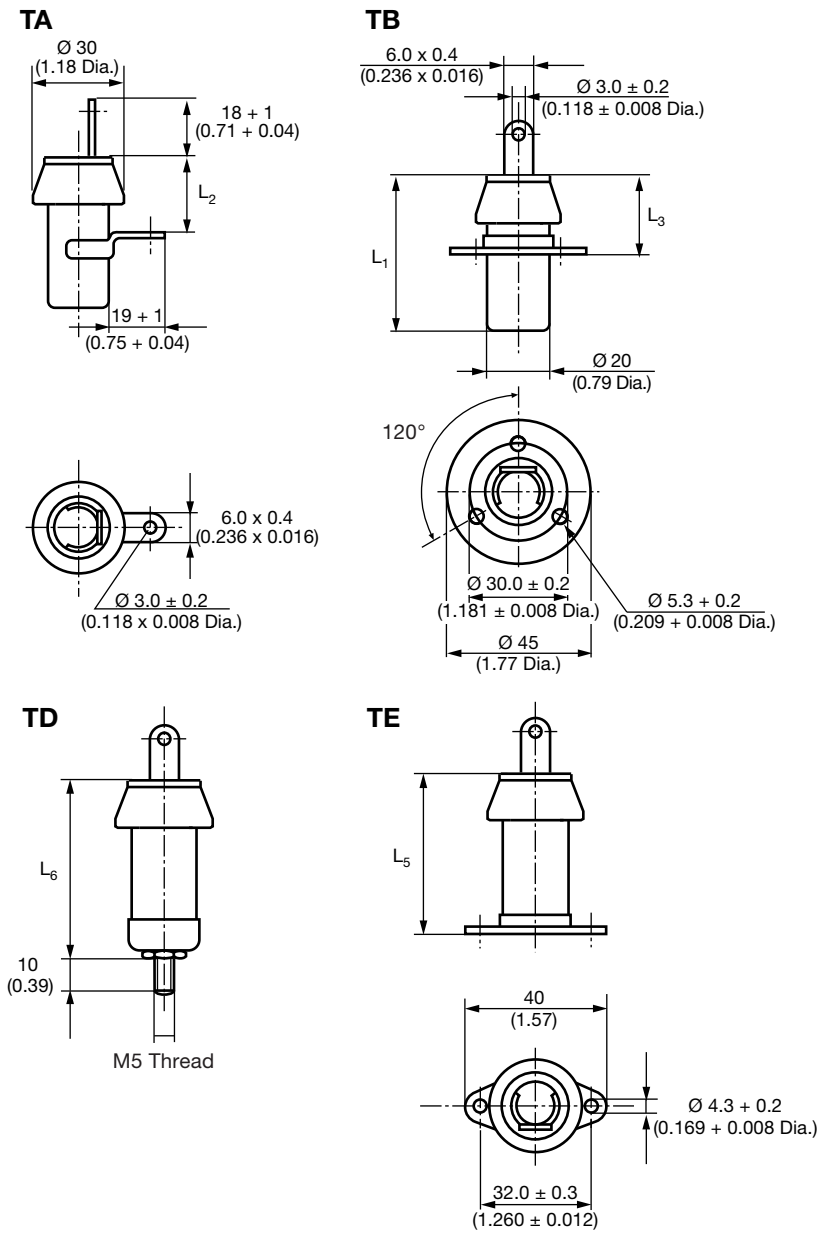
DIMENSIONS in millimeters (inches)



TYPE	T. 020030	T. 020050	T. 020080
Length L_1	30 (1.18)	50 (1.97)	80 (3.15)
Length L_2	15.0 ± 1.5 (0.591 ± 0.059)	25.0 ± 2.0 (0.984 ± 0.079)	40.0 ± 2.0 (1.575 ± 0.079)
Length L_3	20.0 ± 1.5 (0.787 ± 0.059)	25.0 ± 2.0 (0.984 ± 0.079)	40.0 ± 2.0 (1.575 ± 0.079)
Length L_5	31.0 ± 2.0 (1.220 ± 0.079)	51.0 ± 2.0 (2.008 ± 0.079)	81.0 ± 2.0 (3.189 ± 0.079)
Length L_6	36 (1.42)	56 (2.20)	86 (3.39)

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DERATING DIAGRAMS

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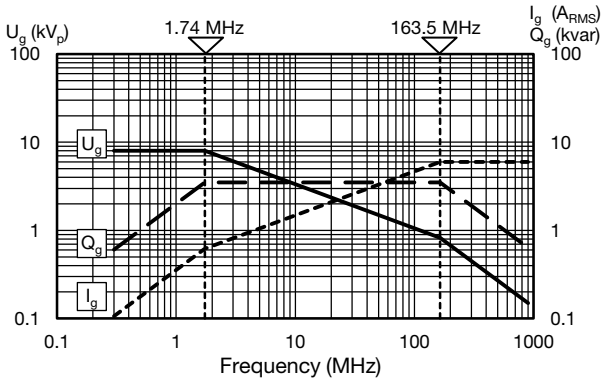

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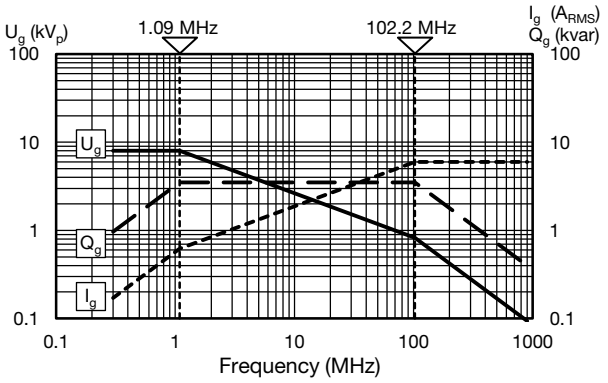

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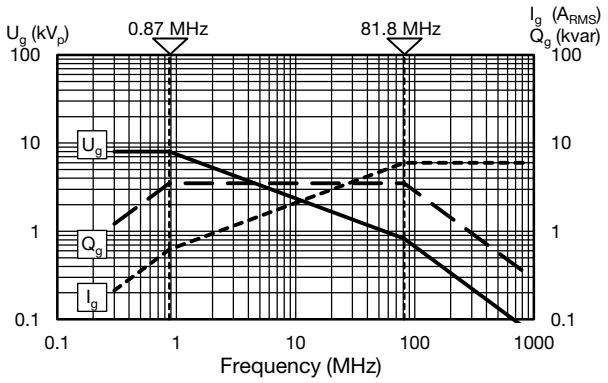

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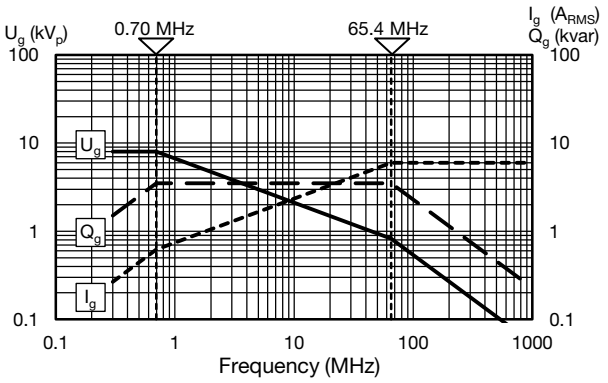

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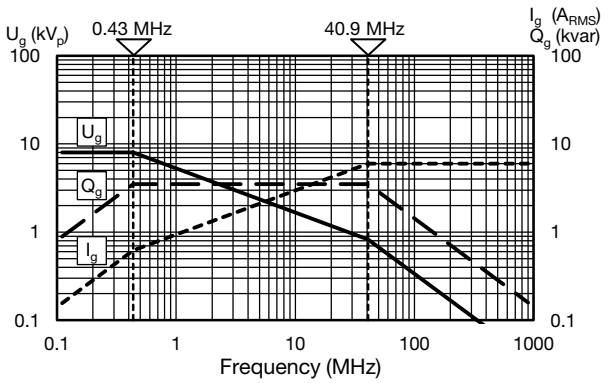

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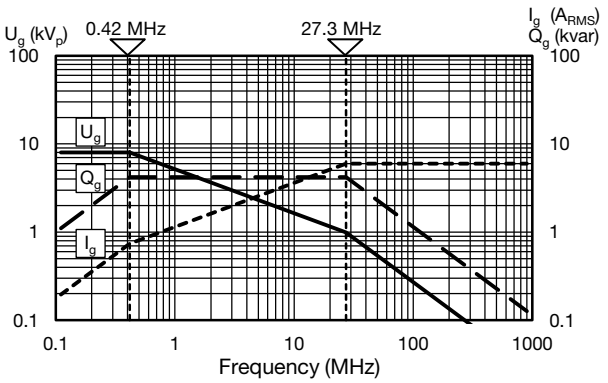

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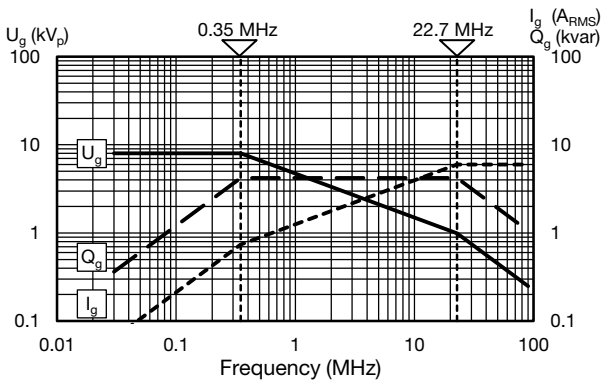

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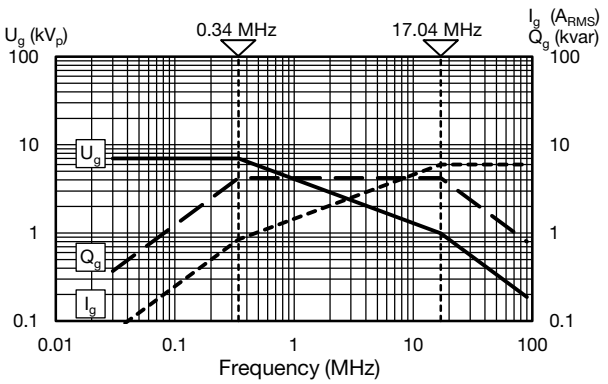

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DERATING DIAGRAMS

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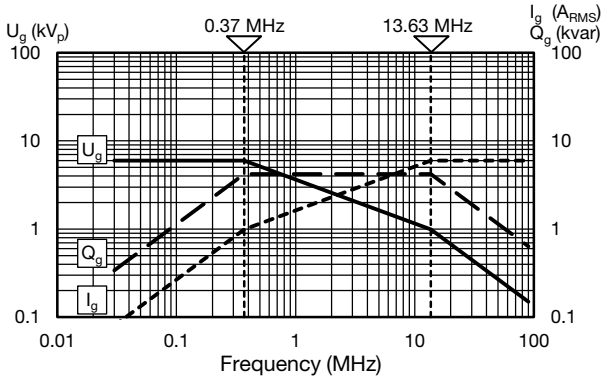

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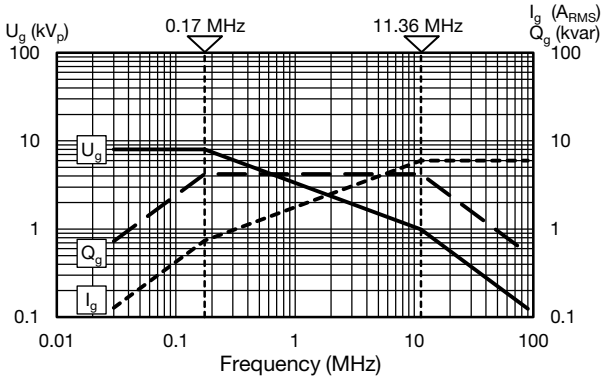

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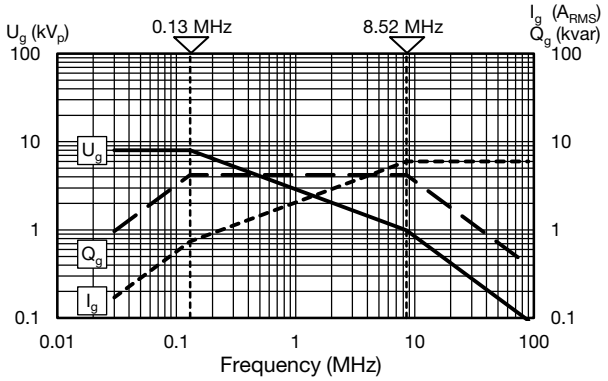

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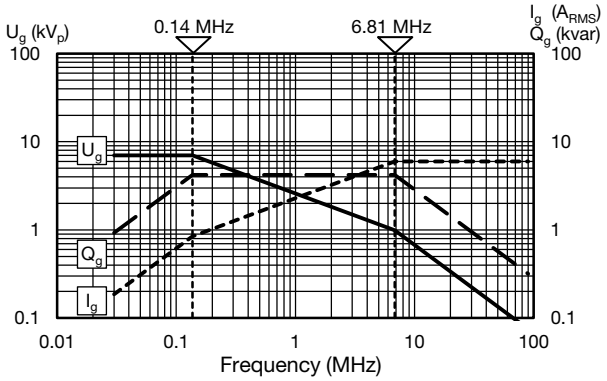

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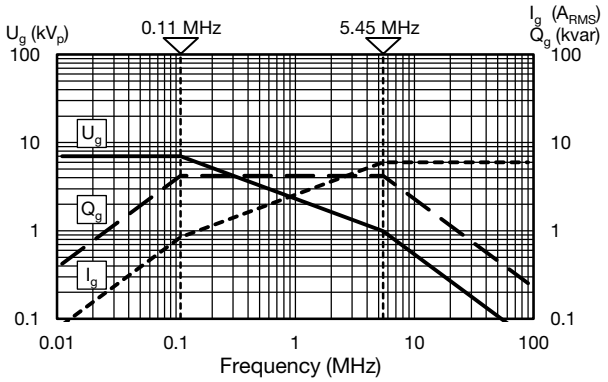

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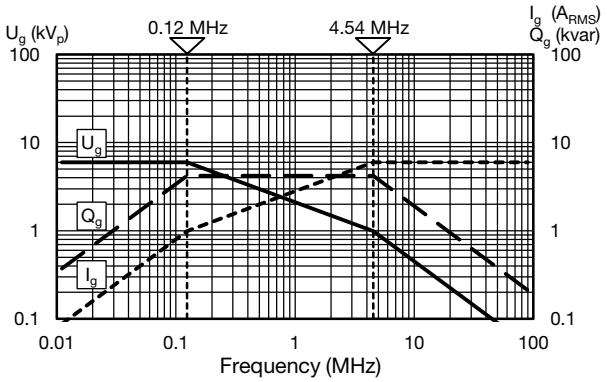

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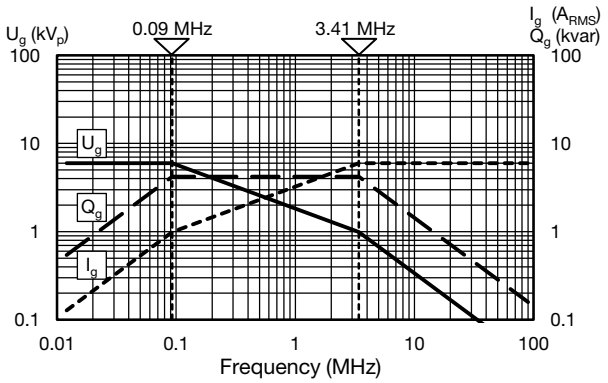

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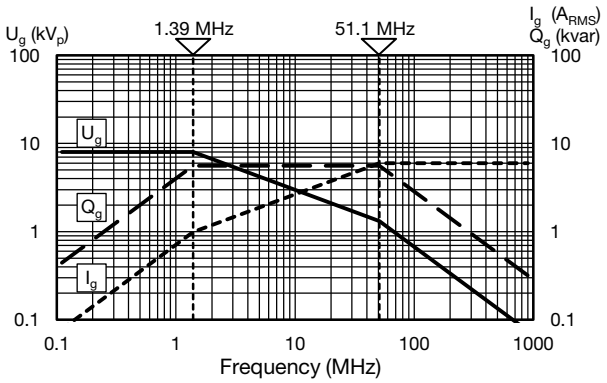

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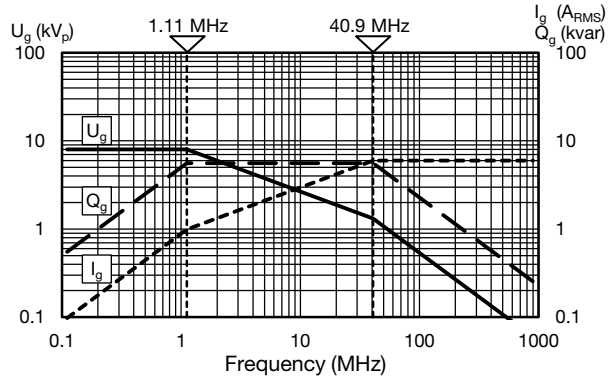

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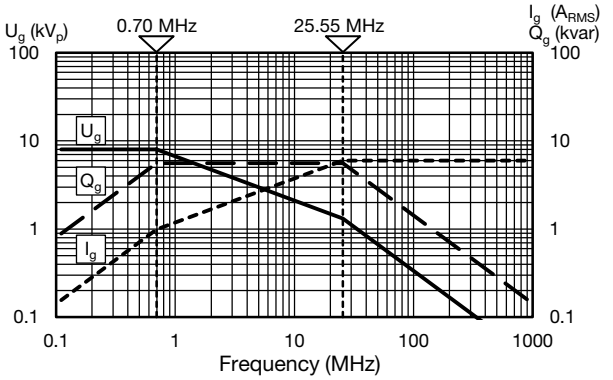

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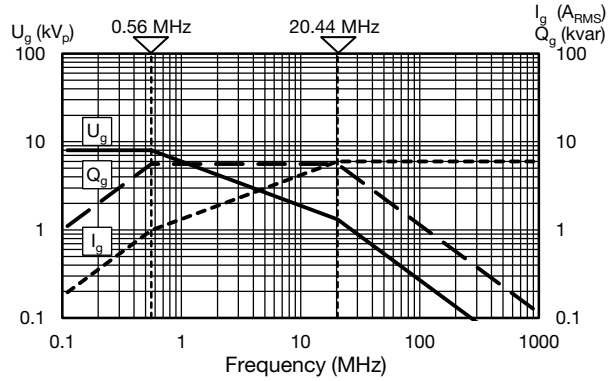

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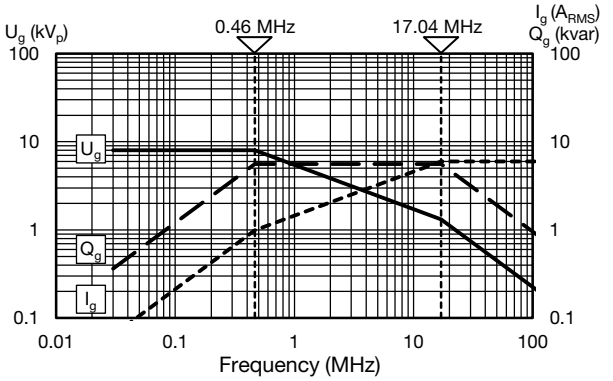

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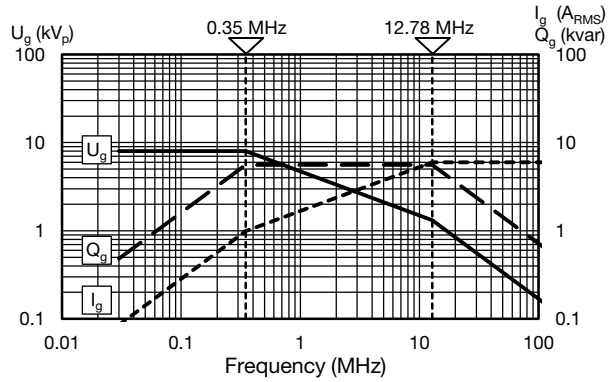

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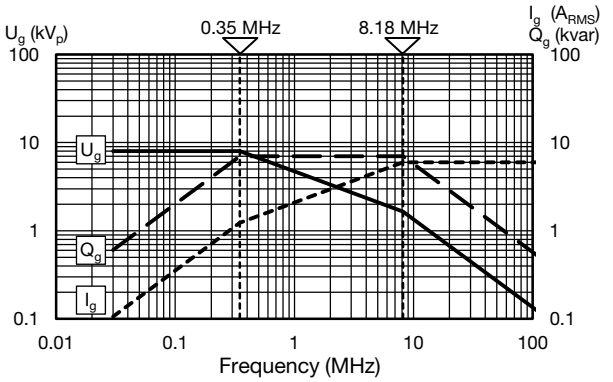

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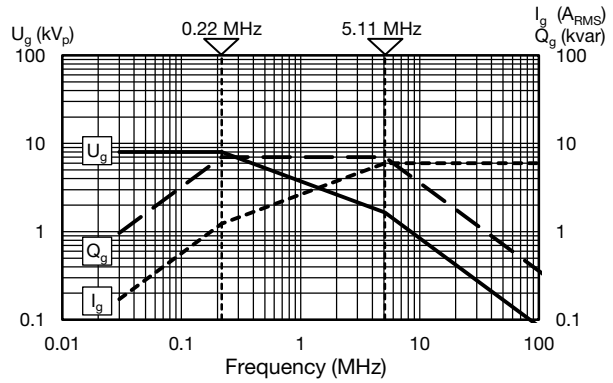

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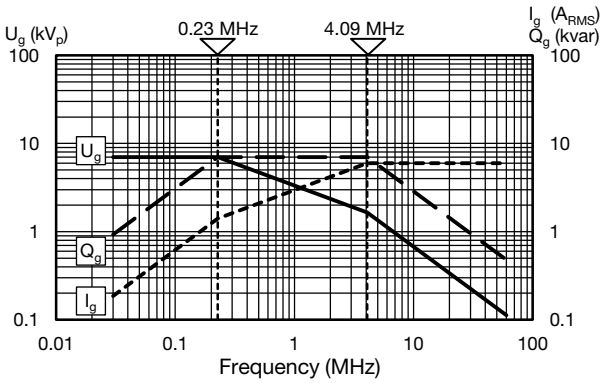

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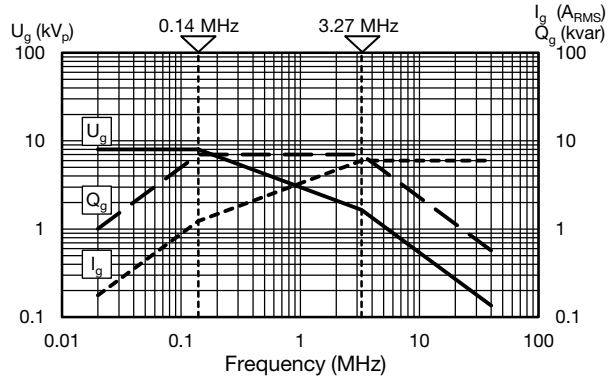

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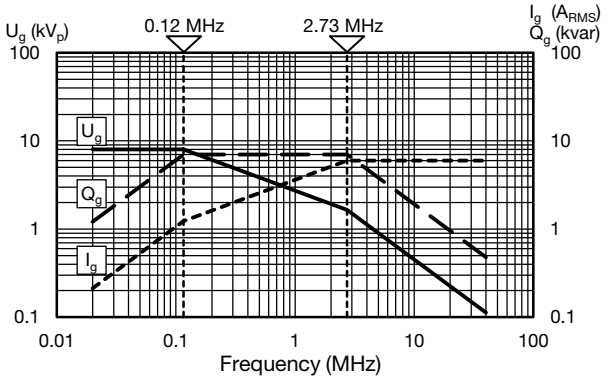

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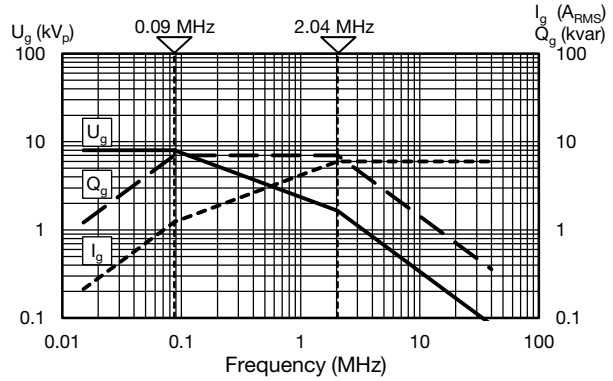

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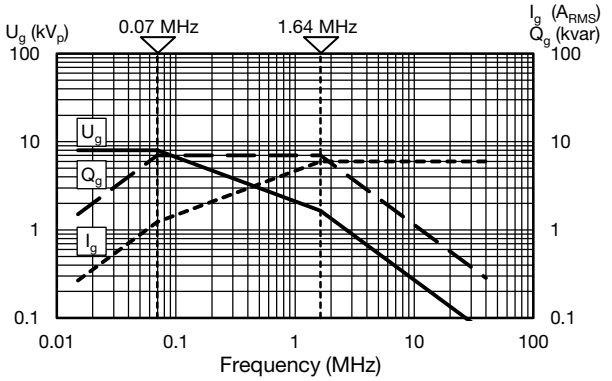

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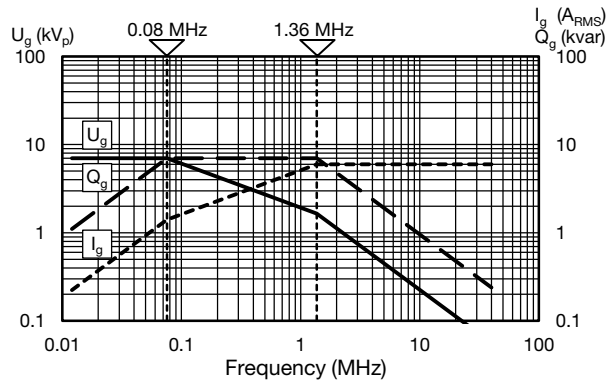

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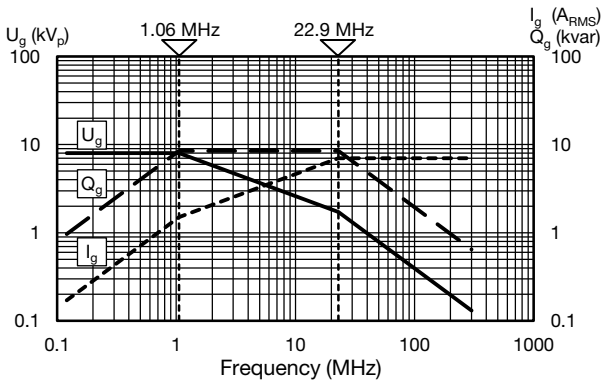

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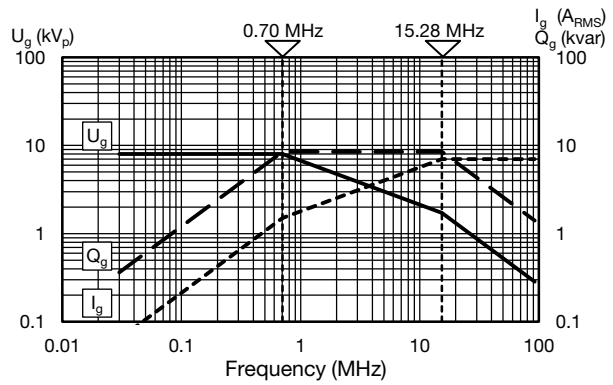

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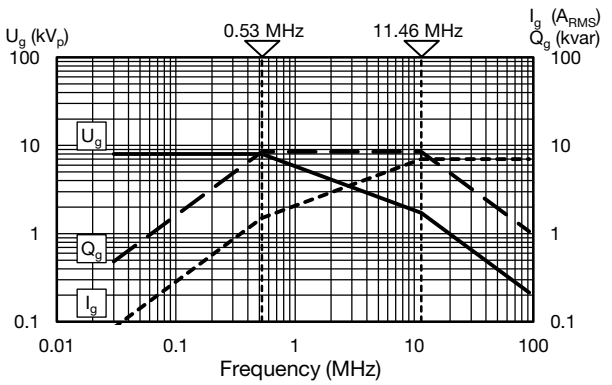

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DERATING DIAGRAMS

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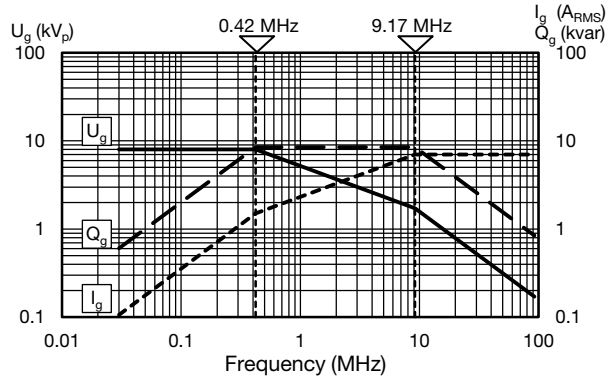

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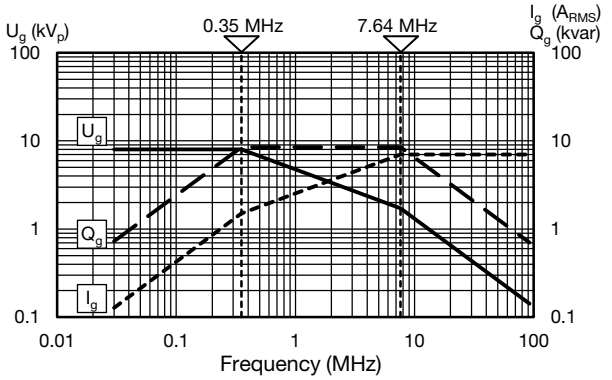

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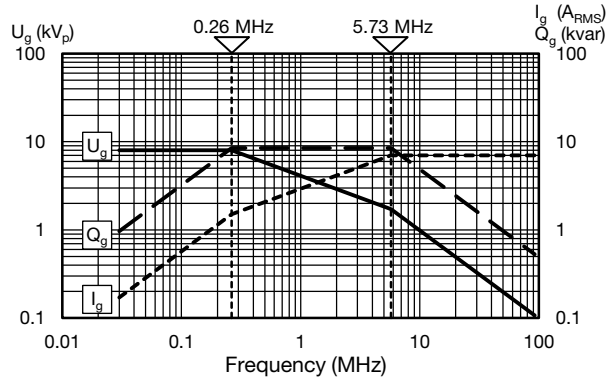

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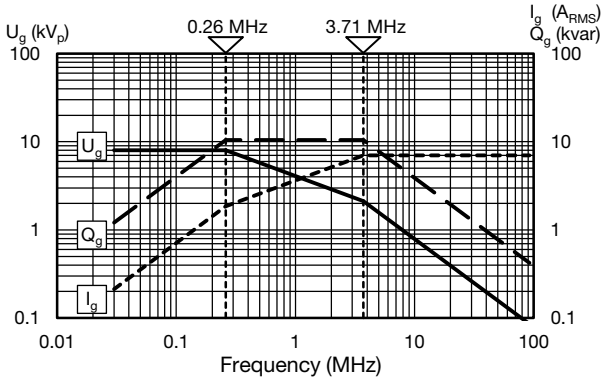

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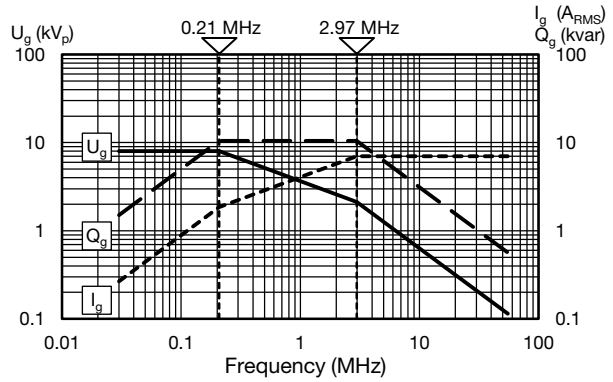

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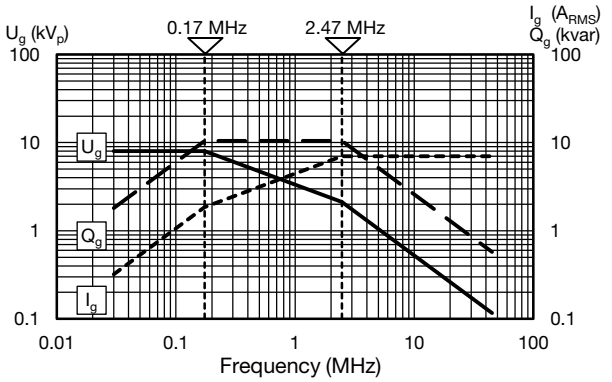

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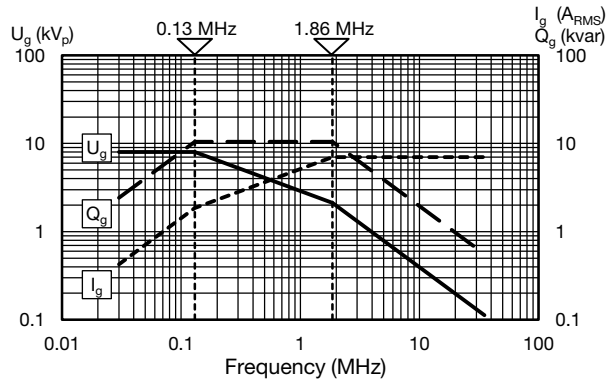

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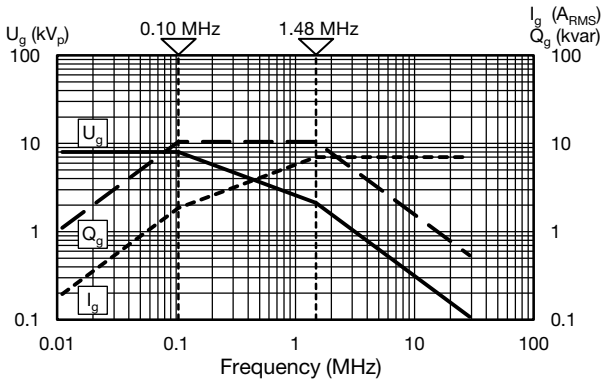

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DERATING DIAGRAMS

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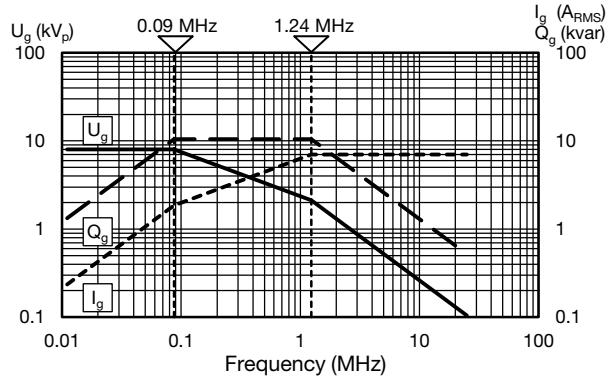

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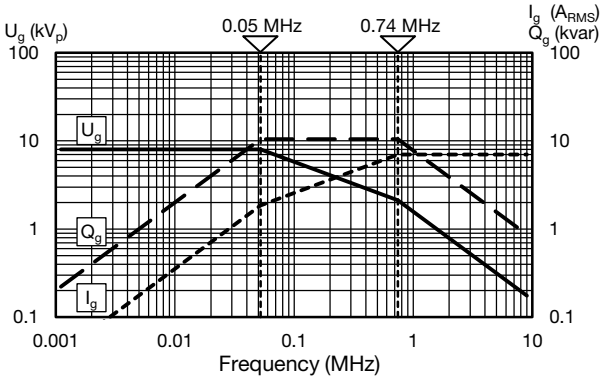

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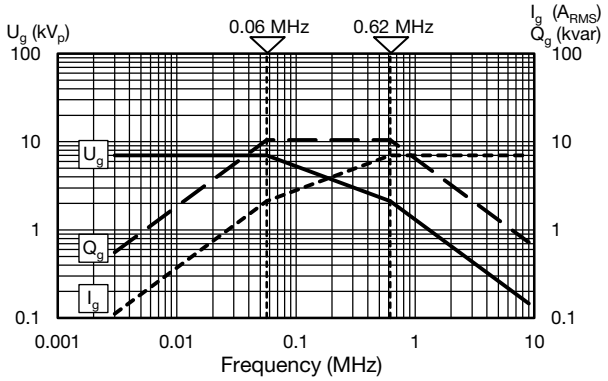

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