

RF Power Pot Capacitors with Mounting Tags, Class 1 Ceramic



FEATURES

- High reliability
- Multiple terminals
- 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		R7, R42, R85				R7, R16, R42, R85, R230			
Type	TA 045090, TB 045090, TD 045090, TE 045090		TA 045120, TB 045120, TD 045120, TE 045120				TA 045150, TB 045150, TD 045150, TE 045150			
Voltage (V _p)	9000	10 000	10 000	11 000	12 000	13 000	11 000	12 000	13 000	14 000
Min. Capacitance (pF)	2500	60	1600	160	80	50	5000	2000	400	60
Max. Capacitance (pF)	2500	1600	1600	500	100	1000	5000	2000	1600	4000
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

50 pF to 5.0 nF

CAPACITANCE TOLERANCE

± 20 %; ± 10 %; ± 5 %

DIELECTRIC STRENGTH TEST

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

INSULATION RESISTANCE

Min. 10 000 MΩ (at 25 °C)

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

- 9.0 kV_p
- 10.0 kV_p
- 11.0 kV_p
- 12.0 kV_p
- 13.0 kV_p
- 14.0 kV_p

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)

OPERATING TEMPERATURE RANGE

-55 °C to +100 °C

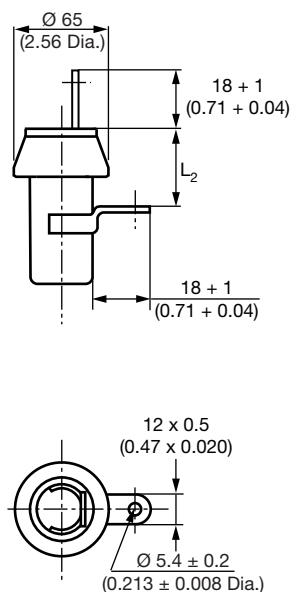
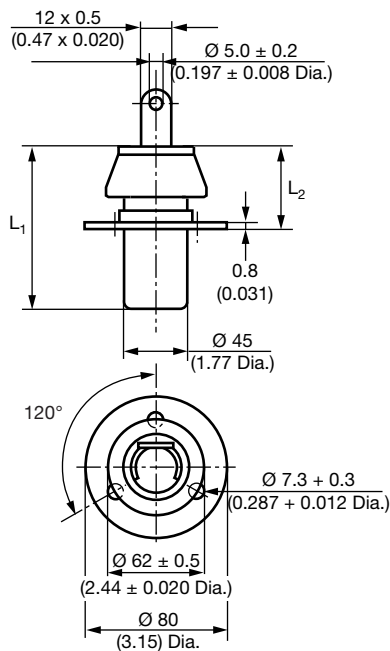
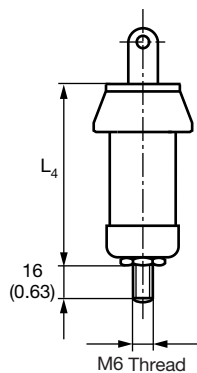
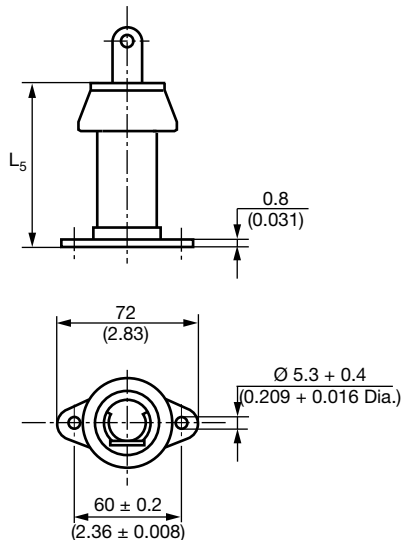


SAP PART NUMBER AND ELECTRICAL DATA					
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _p)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RMS})
TYPE T. 045090					
T#045090BH600##BF1	R7	60	10	22	12
T#045090BH800##BF1		80			
T#045090BH101##BF1		100			
T#045090BH161##BF1		160			
T#045090BH201##BG1	R16	200		28	
T#045090BH251##BG1		250			
T#045090BH301##BG1		300			
T#045090BH401##BH1	R42	400			
T#045090BH501##BH1		500			
T#045090BH601##BH1		600			
T#045090BH801##BJ1	R85	800			
T#045090BH102##BJ1		1000			
T#045090BH162##BJ1		1600			
T#045090WC252##BJ1		2500			
		9.0			
TYPE T. 045120					
T#045120WH500##BF1	R7	50	13	28	10
T#045120WH600##BF1		60	12		
T#045120WF800##BF1		80			
T#045120WF101##BF1		100			
T#045120WE161##BF1		160	11		
T#045120WH251##BH1	R42	250	13	35	
T#045120WH301##BH1		300			
T#045120WH401##BH1		400			
T#045120WE501##BH1		500	11		
T#045120WH601##BJ1	R85	600	13		
T#045120WH801##BJ1		800			
T#045120WH102##BJ1		1000			
T#045120BH162##BJ1		1600	10		
TYPE T. 045150					
T#045150WJ600##BF1	R7	60	14	35	12
T#045150WJ800##BF1		80			
T#045150WJ101##BF1		100			
T#045150WJ201##BG1	R16	200			
T#045150WJ301##BH1	R42	300	13	42	
T#045150WH401##BH1		400			
T#045150WH501##BH1		500			
T#045150WH601##BH1		600			
T#045150WJ801##BJ1	R85	800	14		
T#045150WH102##BJ1		1000	13		
T#045150WH162##BJ1		1600			
T#045150WF202##BJ1		2000	12		
T#045150WJ302##BK1		R230	3000		
T#045150WJ402##BK1	4000				
T#045150WE502##BK1	5000		11		

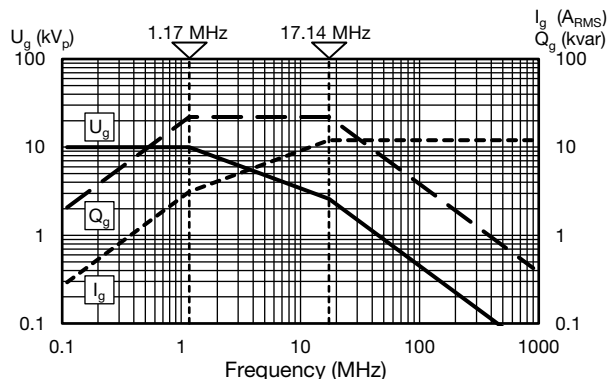
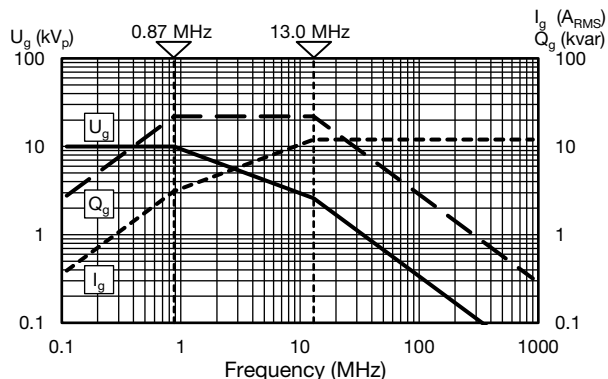
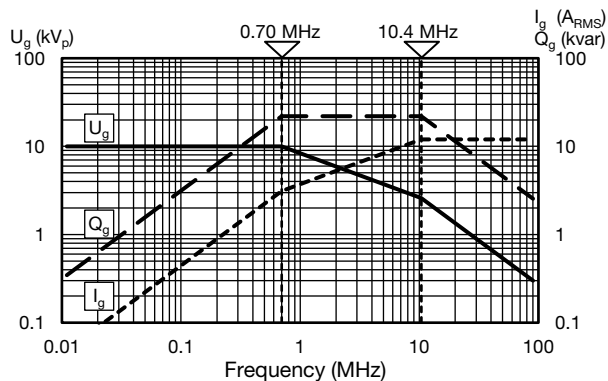
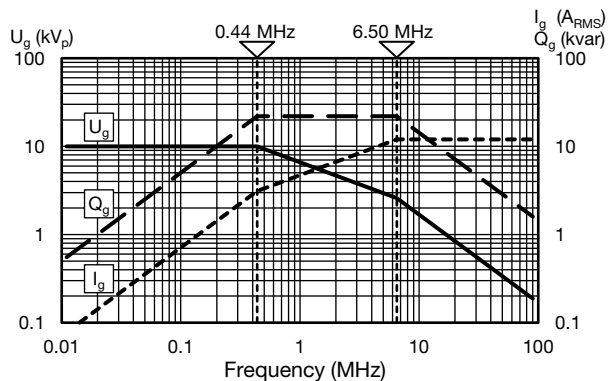
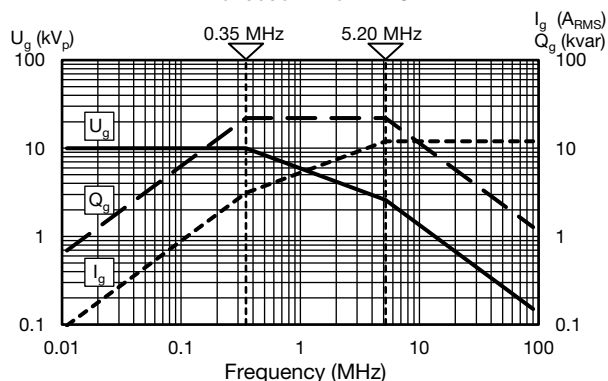
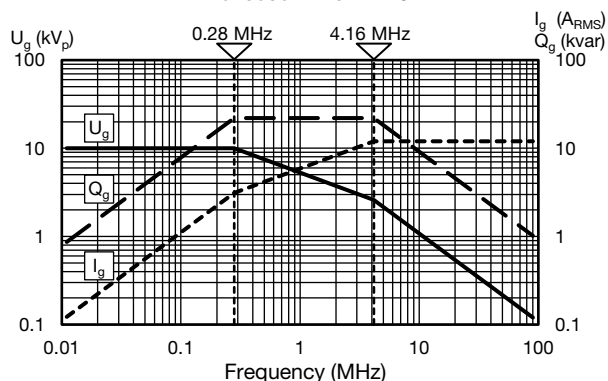
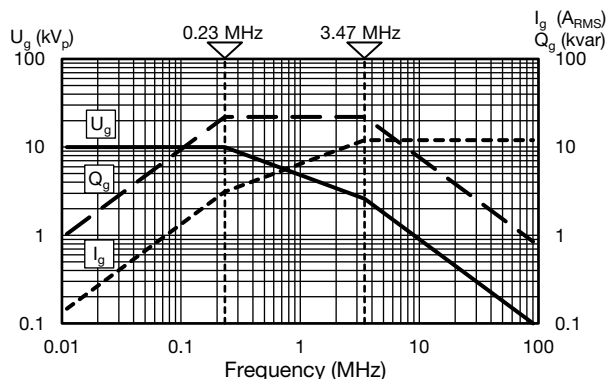
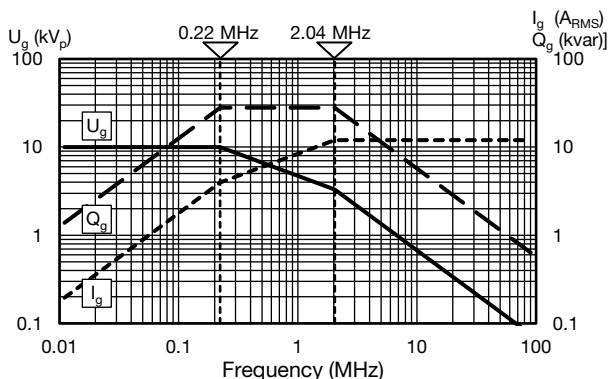
Notes

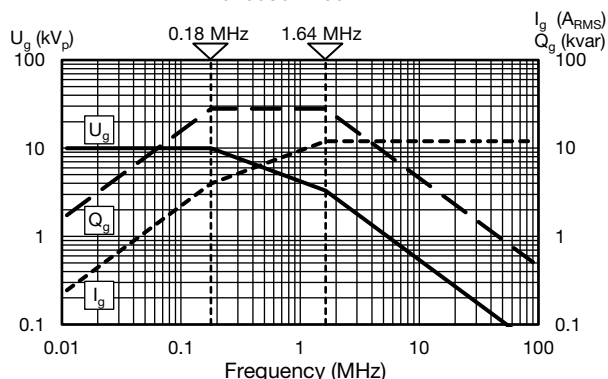
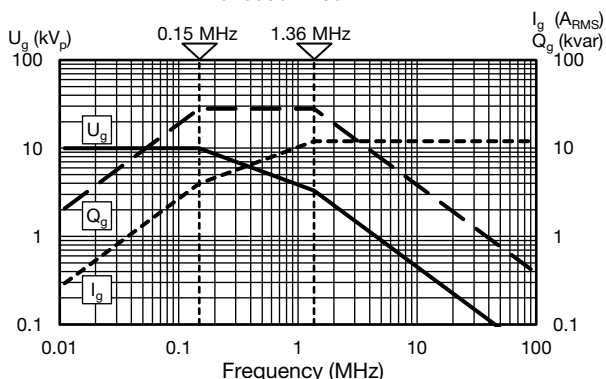
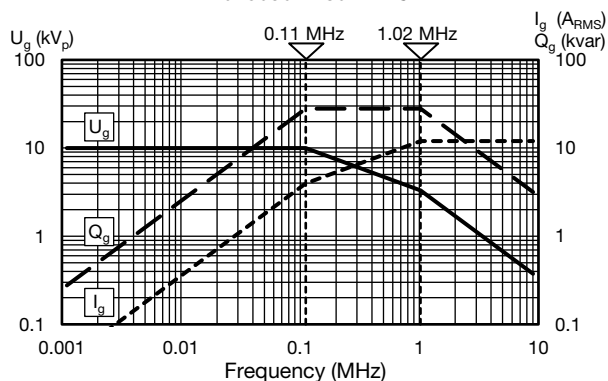
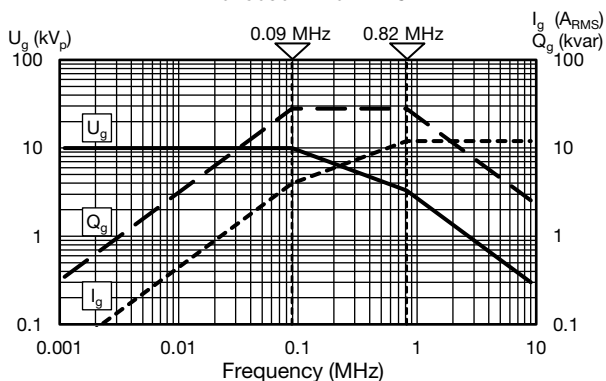
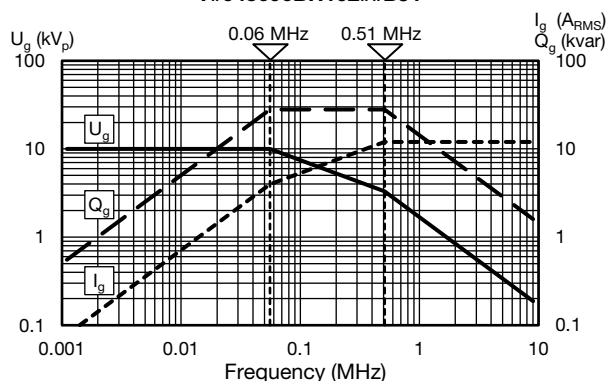
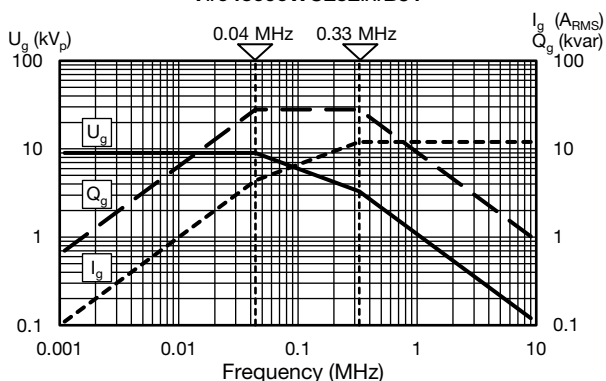
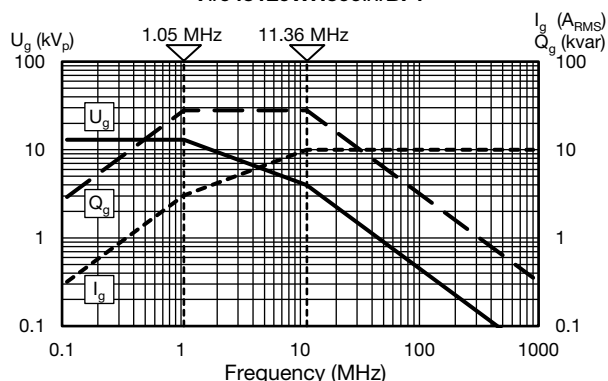
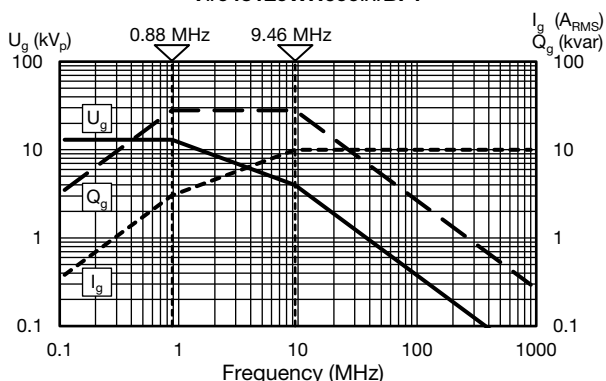
- # 2nd digit: code letter of the terminal version A, B, D, E
- ## 14th to 15th digit: capacitance tolerance code $\pm 20\% = 38$, $\pm 10\% = 36$, $\pm 5\% = 33$
- (1) The surface temperature during operation must not exceed +100 °C

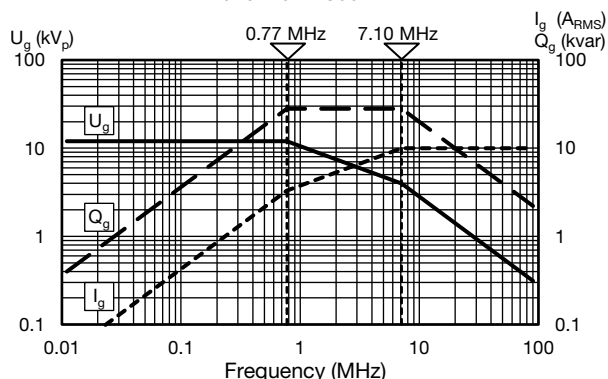
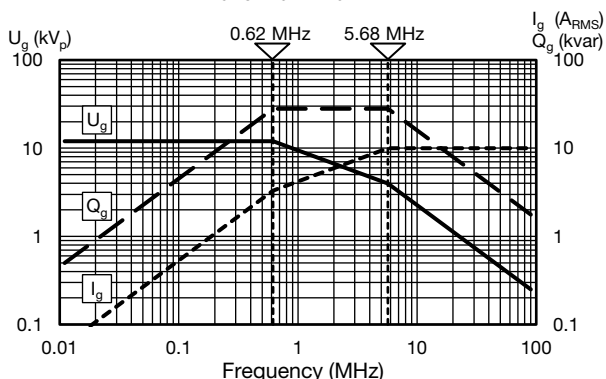
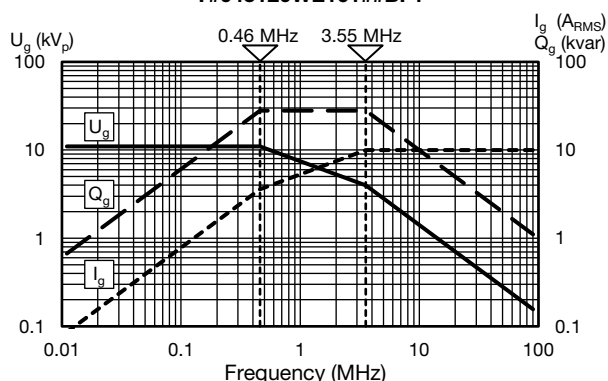
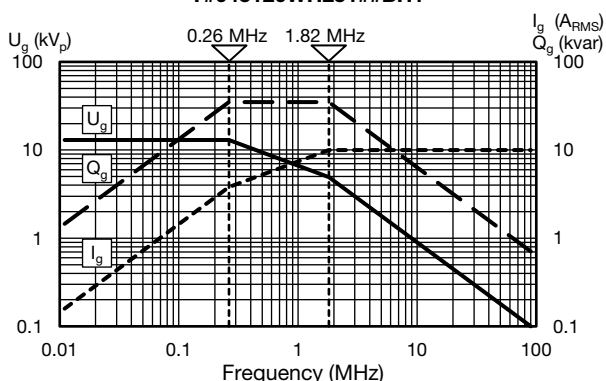
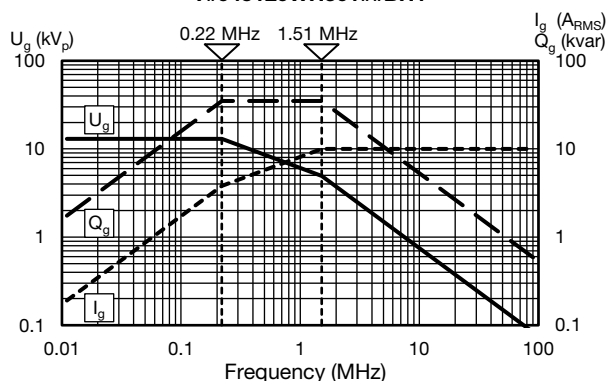
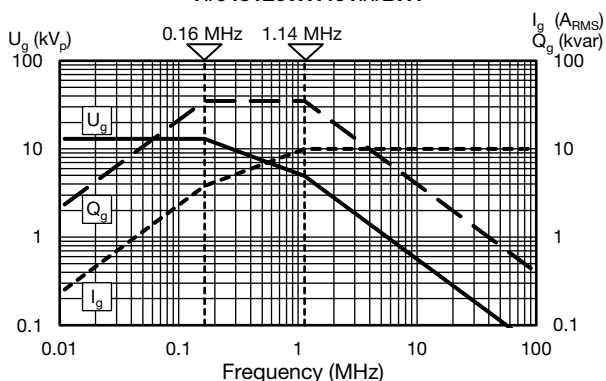
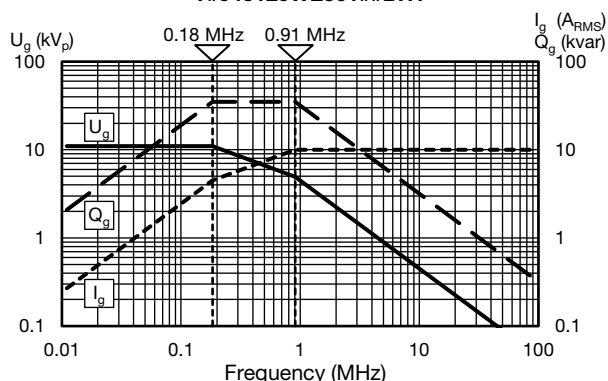
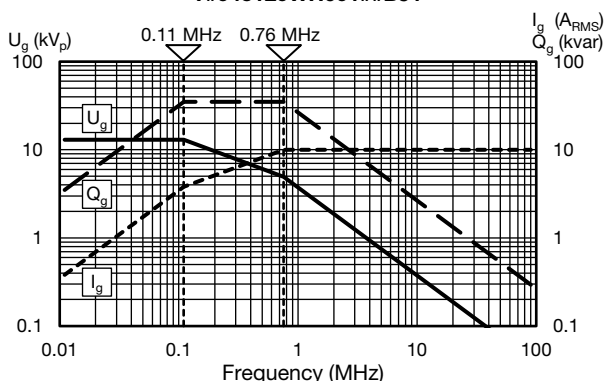
DIMENSIONS in millimeters (inches)

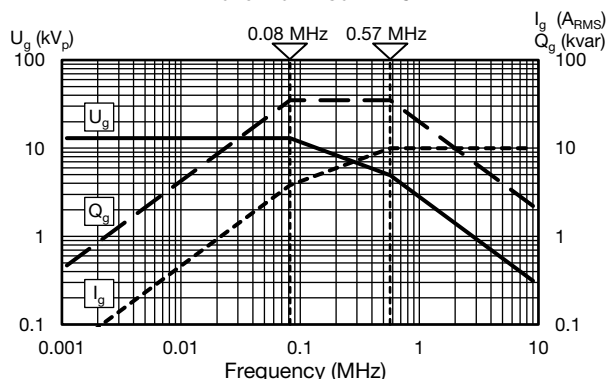
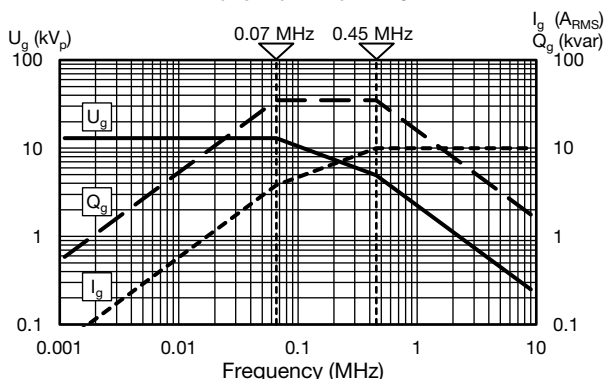
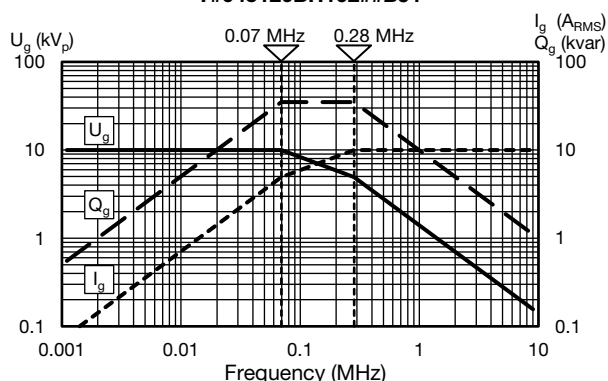
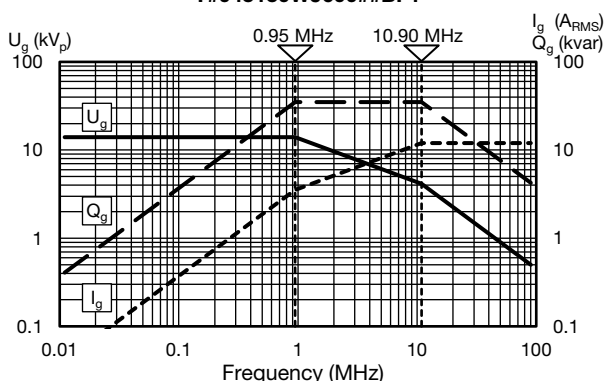
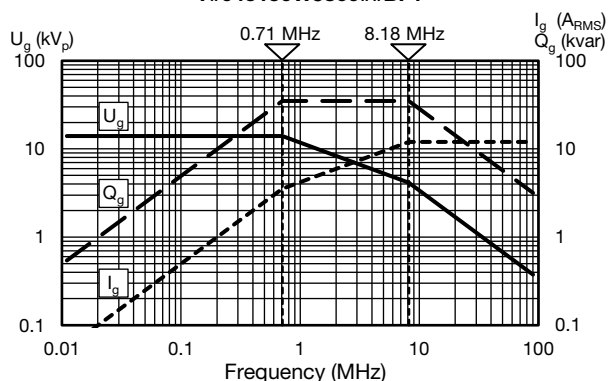
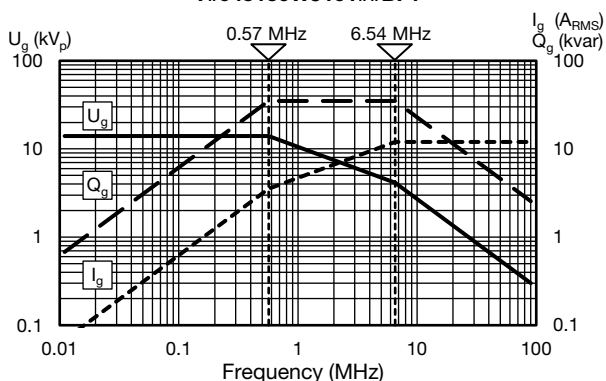
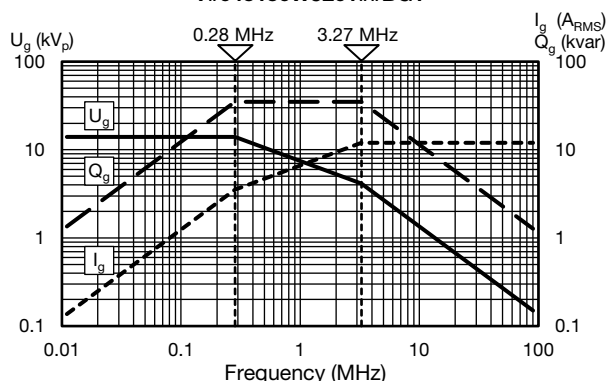
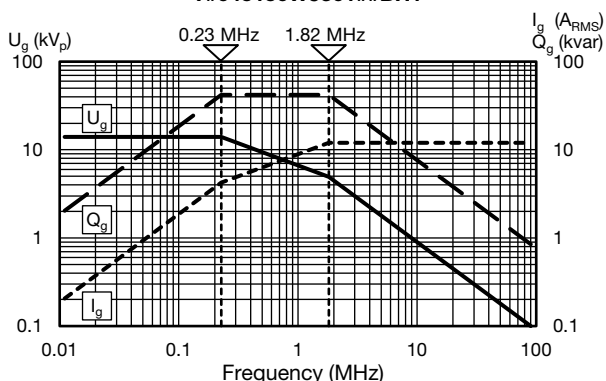
TA

TB

TD

TE


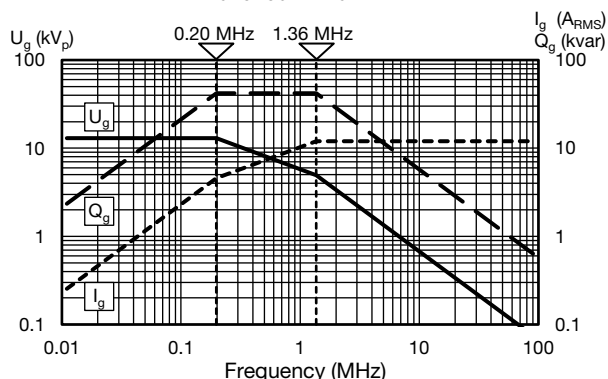
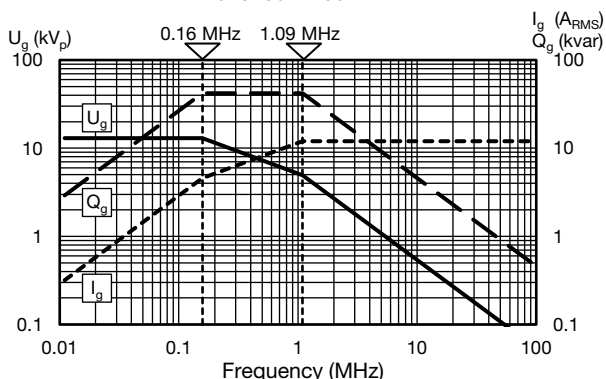
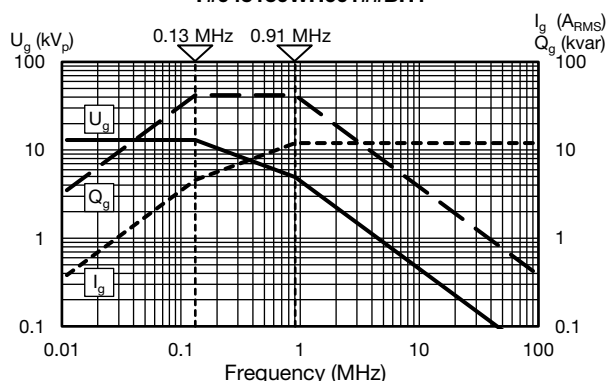
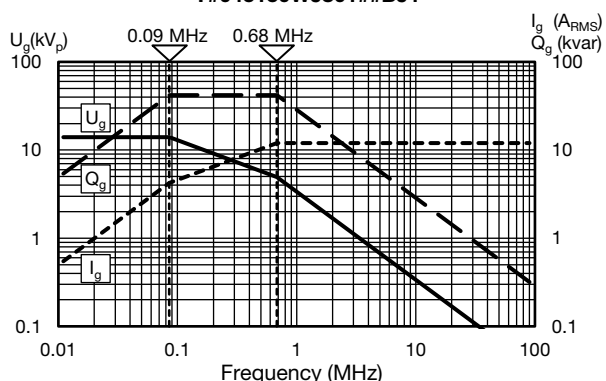
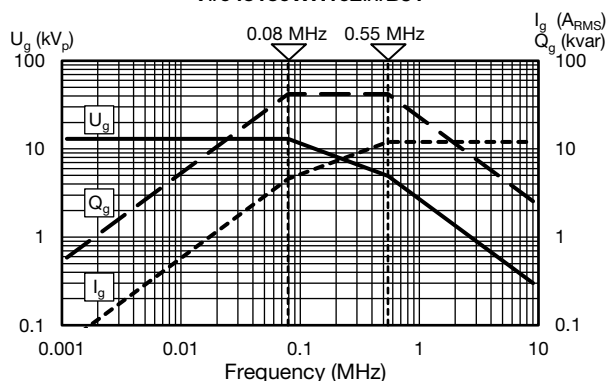
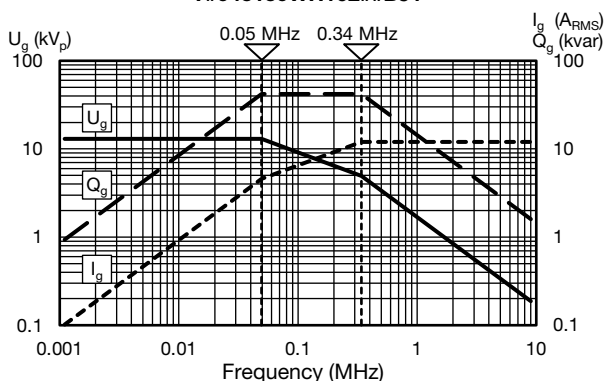
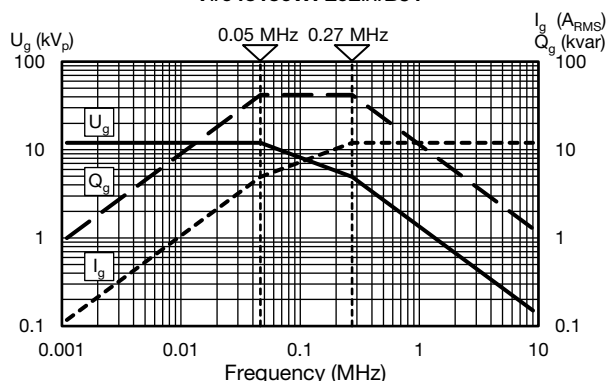
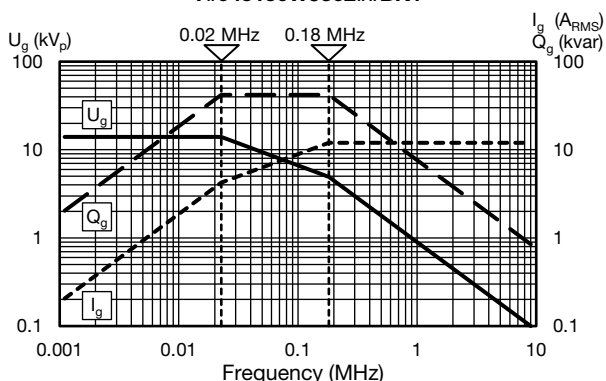
TYPE	T. 045090	T. 045120	T. 045150
Length L_1	90 (3.54)	120 (4.72)	150 (5.91)
Length L_2	45 ± 2 (1.77 ± 0.08)	60 ± 2 (2.36 ± 0.08)	75 ± 2 (2.95 ± 0.08)
Length L_4	97 (3.82)	127 (5.00)	157 (6.18)
Length L_5	92 ± 2 (3.62 ± 0.08)	122 ± 2 (4.80 ± 0.08)	152 ± 2 (5.98 ± 0.08)

DERATING DIAGRAMS
T#045090BH600##BF1

T#045090BH800##BF1

T#045090BH101##BF1

T#045090BH161##BF1

T#045090BH201##BG1

T#045090BH251##BG1

T#045090BH301##BG1

T#045090BH401##BH1


DERATING DIAGRAMS
T#045090BH501##BH1

T#045090BH601##BH1

T#045090BH801##BJ1

T#045090BH102##BJ1

T#045090BH162##BJ1

T#045090WC252##BJ1

T#045120WH500##BF1

T#045120WH600##BF1


DERATING DIAGRAMS
T#045120WF800##BF1

T#045120WF101##BF1

T#045120WE161##BF1

T#045120WH251##BH1

T#045120WH301##BH1

T#045120WH401##BH1

T#045120WE501##BH1

T#045120WH601##BJ1


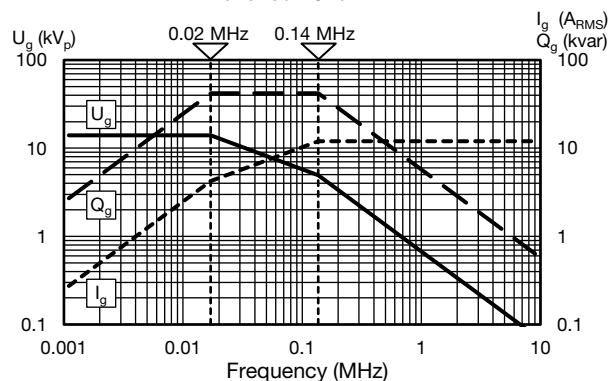
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T#045120BH162##BJ1

T#045150WJ600##BF1

T#045150WJ800##BF1

T#045150WJ101##BF1

T#045150WJ201##BG1

T#045150WJ301##BH1


DERATING DIAGRAMS
T#045150WH401##BH1

T#045150WH501##BH1

T#045150WH601##BH1

T#045150WJ801##BJ1

T#045150WH102##BJ1

T#045150WH162##BJ1

T#045150WF202##BJ1

T#045150WJ302##BK1


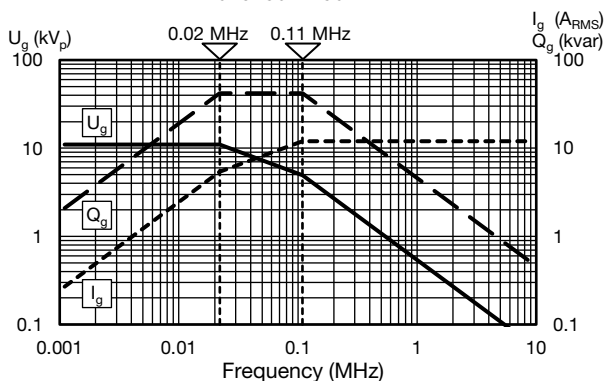


DERATING DIAGRAMS

T#045150WJ402##BK1



T#045150WE502##BK1



RELATED DOCUMENTS

General Information

www.vishay.com/doc?22071



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