

RF Power Pot Capacitors With Mounting Tags, Class 1 Ceramic



FEATURES

- 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		R7, R42, R85				R7, R16, R42, R85, R230			
Type	TD 045090		TD 045120				TD 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

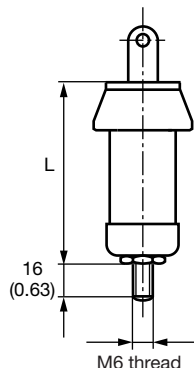


SAP PART NUMBER AND ELECTRICAL DATA					
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV _p)	RATED POWER ⁽¹⁾ (kvar)	RATED CURRENT (A _{RM} S)
TYPE TD 045090					
TD045090BH600##BF1	R7	60	10	22	12
TD045090BH800##BF1		80			
TD045090BH101##BF1		100			
TD045090BH161##BF1		160			
TD045090BH201##BG1	R16	200		28	
TD045090BH251##BG1		250			
TD045090BH301##BG1		300			
TD045090BH401##BH1	R42	400			
TD045090BH501##BH1		500			
TD045090BH601##BH1		600			
TD045090BH801##BJ1	R85	800			
TD045090BH102##BJ1		1000			
TD045090BH162##BJ1		1600			
TD045090WC252##BJ1		2500			
		9.0			
TYPE TD 045120					
TD045120WH500##BF1	R7	50	13	28	10
TD045120WH600##BF1		60	12		
TD045120WF800##BF1		80			
TD045120WF101##BF1		100			
TD045120WE161##BF1		160	11		
TD045120WH251##BH1	R42	250	13	35	
TD045120WH301##BH1		300			
TD045120WH401##BH1		400			
TD045120WE501##BH1		500	11		
TD045120WH601##BJ1	R85	600	13		
TD045120WH801##BJ1		800			
TD045120WH102##BJ1		1000			
TD045120BH162##BJ1		1600	10		
TYPE TD 045150					
TD045150WJ600##BF1	R7	60	14	35	12
TD045150WJ800##BF1		80			
TD045150WJ101##BF1		100			
TD045150WJ201##BG1	R16	200			
TD045150WJ301##BH1	R42	300	13	42	
TD045150WH401##BH1		400			
TD045150WH501##BH1		500			
TD045150WH601##BH1		600			
TD045150WJ801##BJ1	R85	800	14		
TD045150WH102##BJ1		1000	13		
TD045150WH162##BJ1		1600			
TD045150WF202##BJ1		2000	12		
TD045150WJ302##BK1		R230	3000		
TD045150WJ402##BK1	4000				
TD045150WE502##BK1	5000		11		

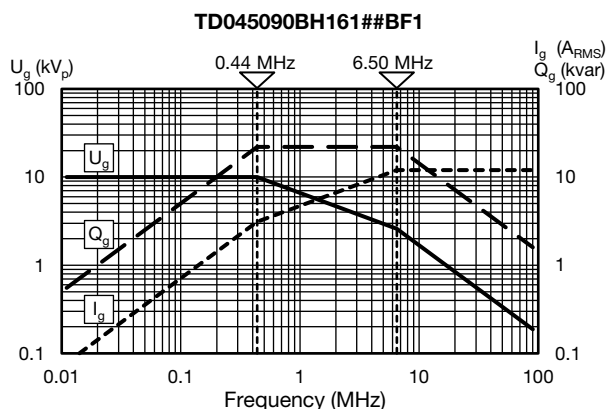
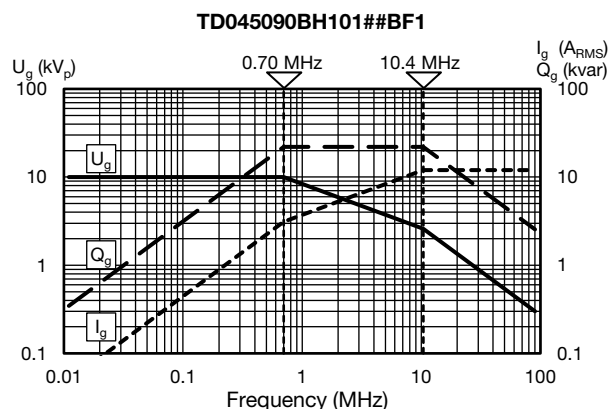
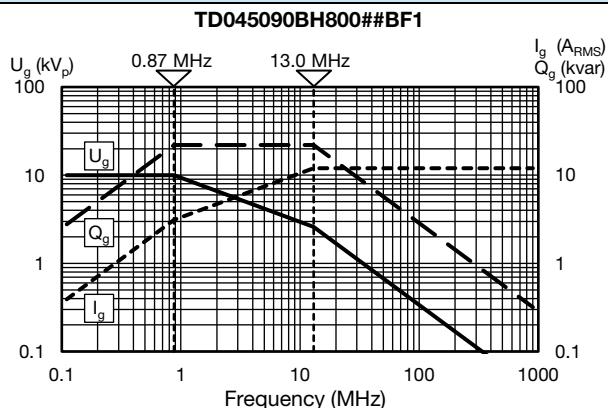
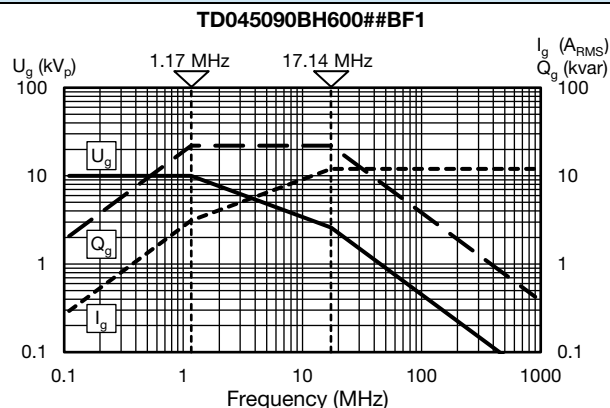
Notes

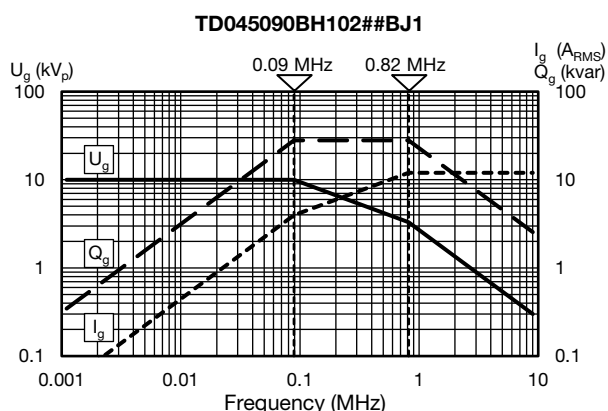
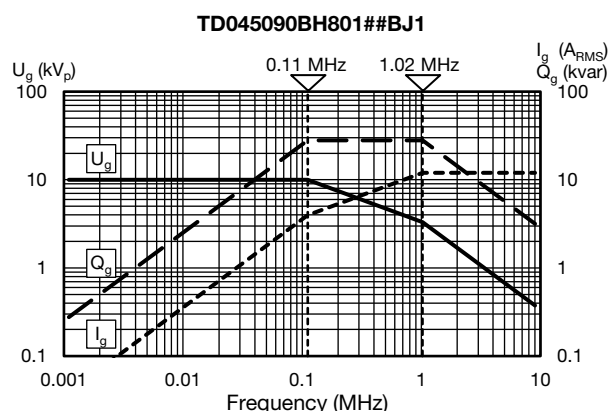
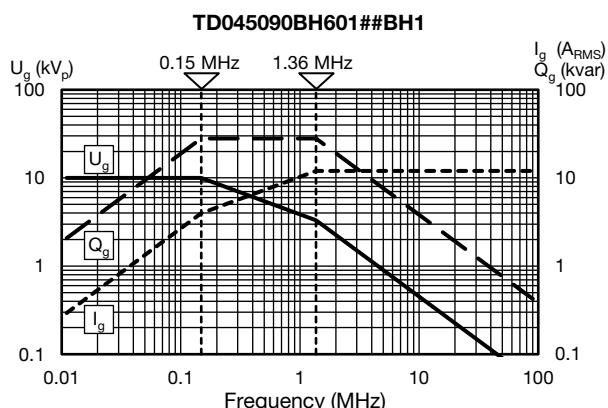
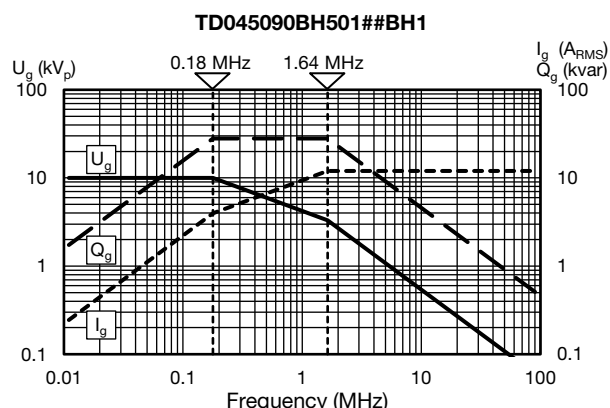
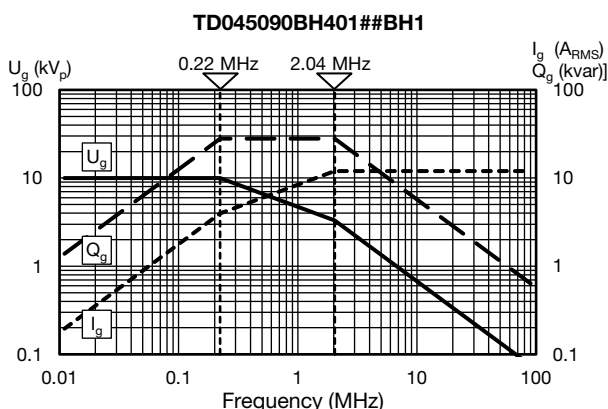
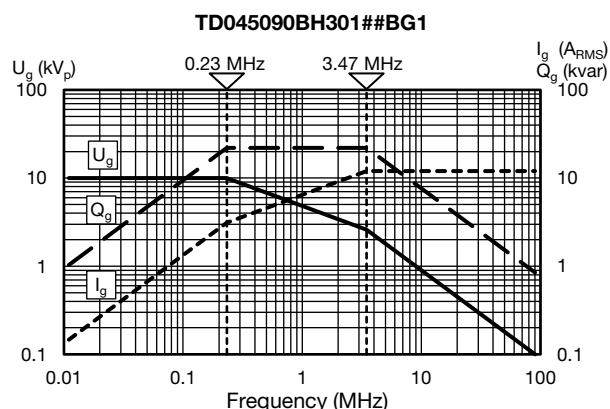
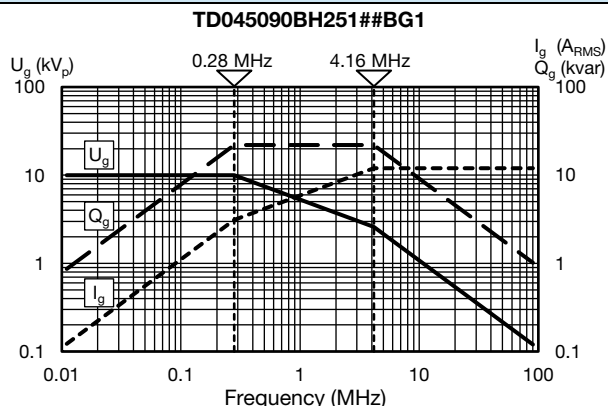
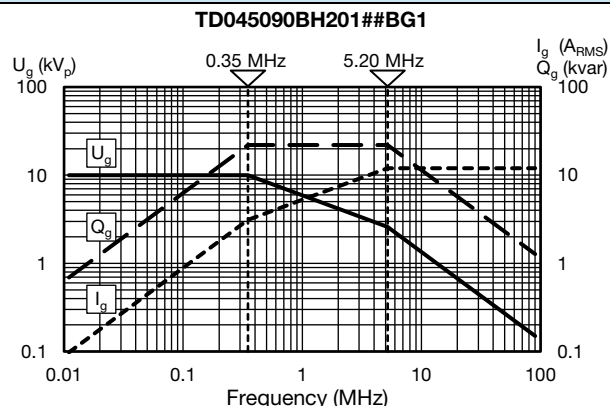
- ## 14th to 15th digit: capacitance tolerance code $\pm 20\% = 38$, $\pm 10\% = 36$, $\pm 5\% = 33$

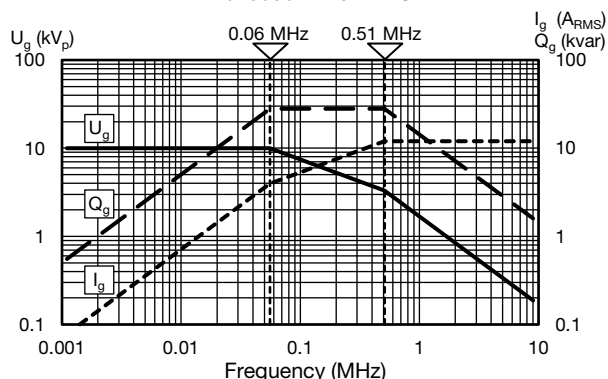
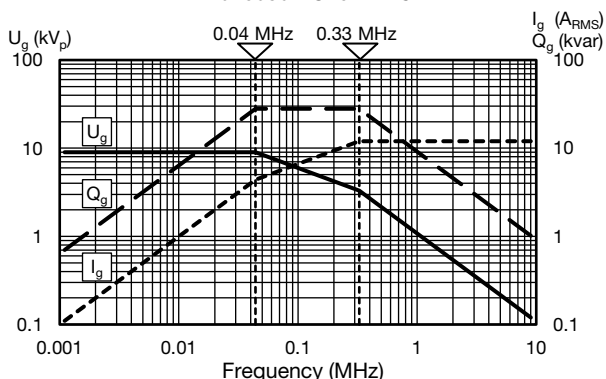
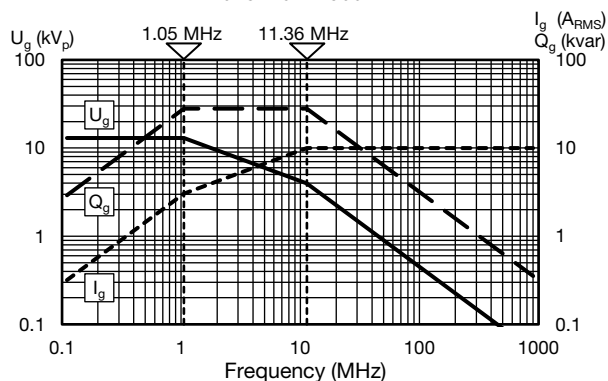
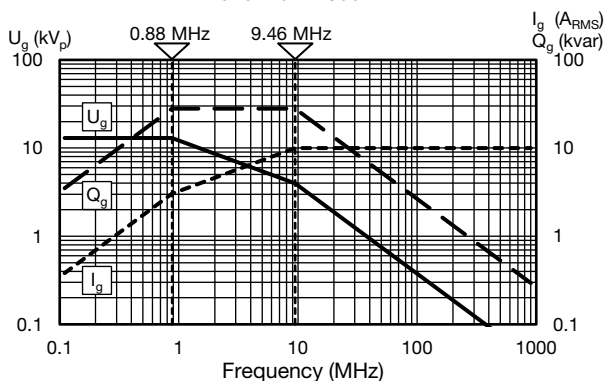
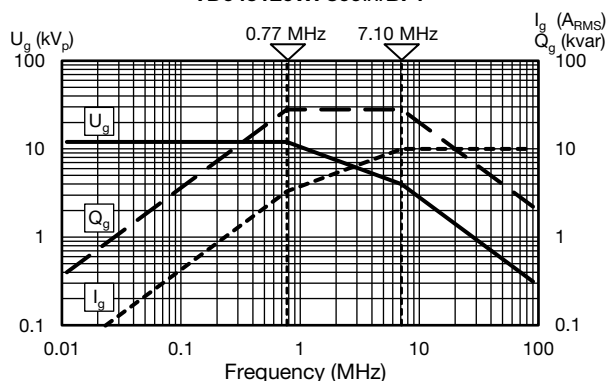
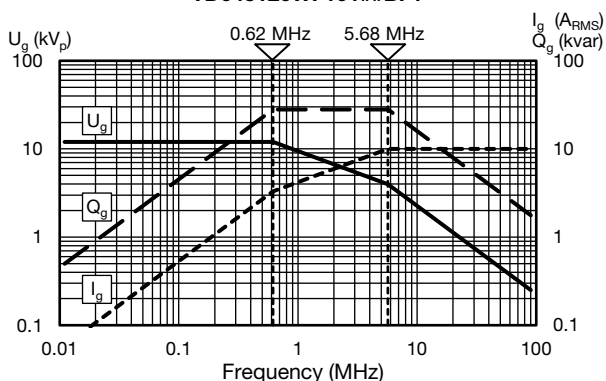
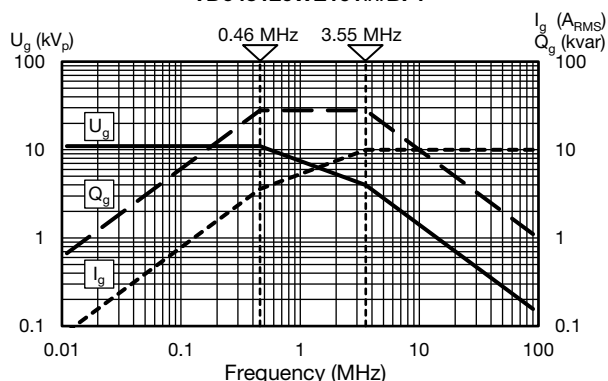
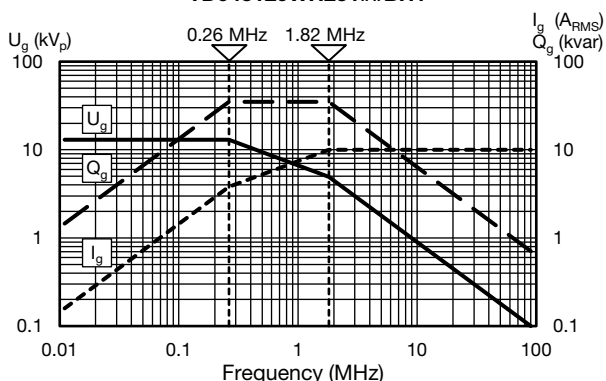
⁽¹⁾ The surface temperature during operation must not exceed +100 °C

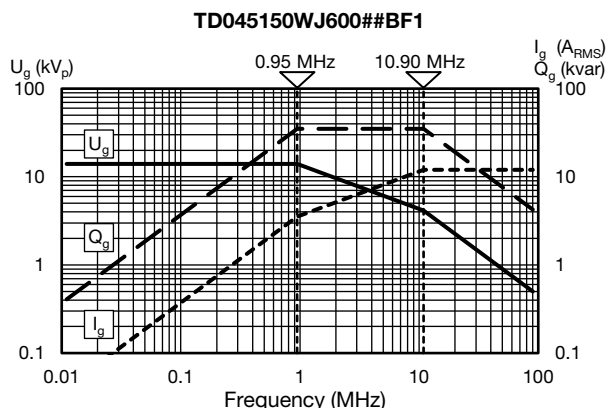
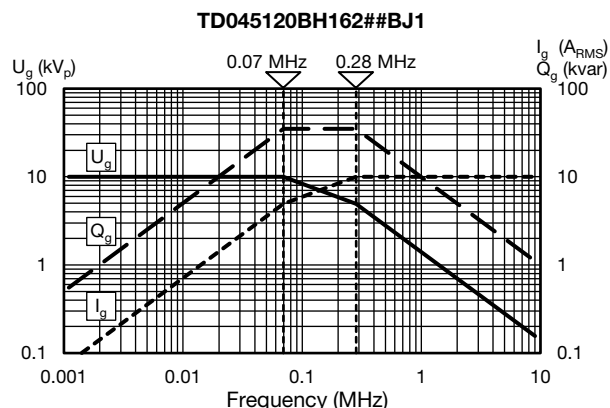
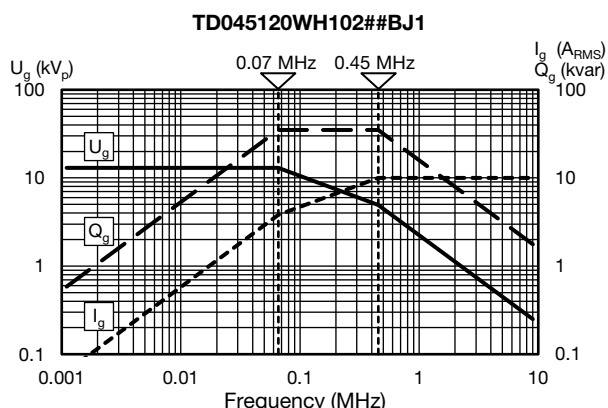
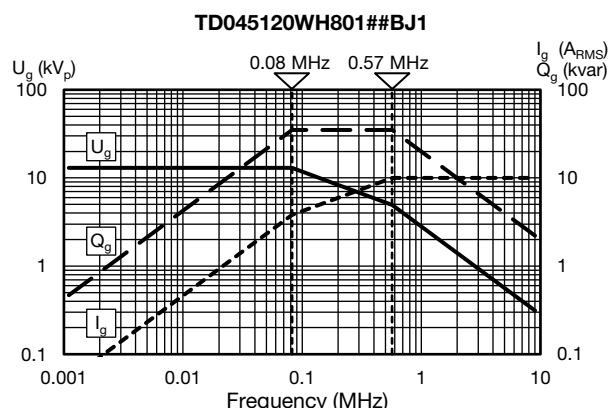
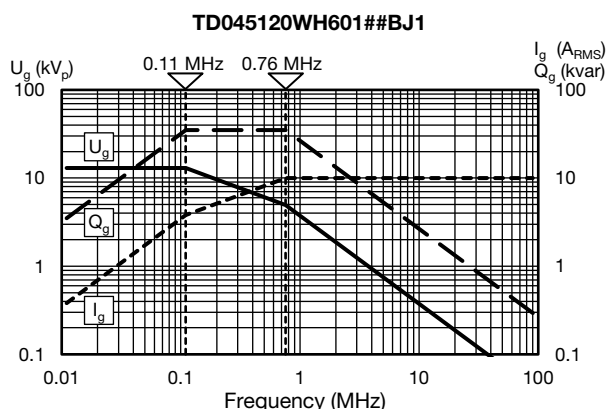
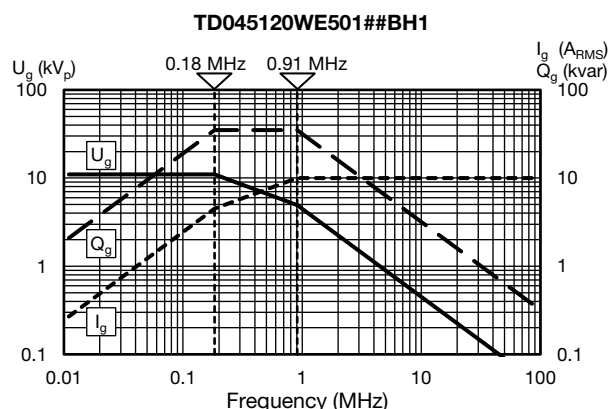
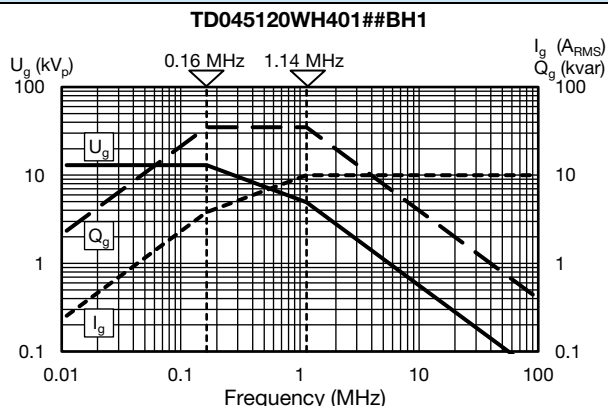
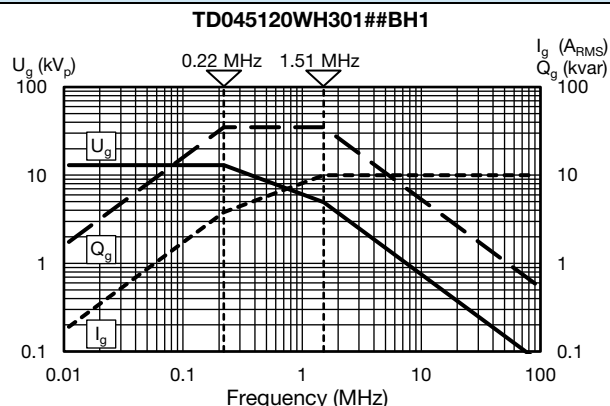
DIMENSIONS in millimeters (inches)


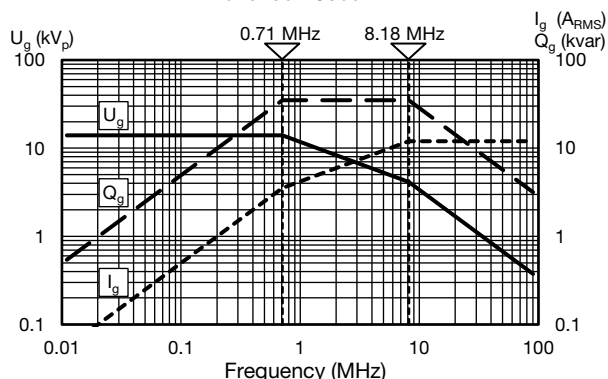
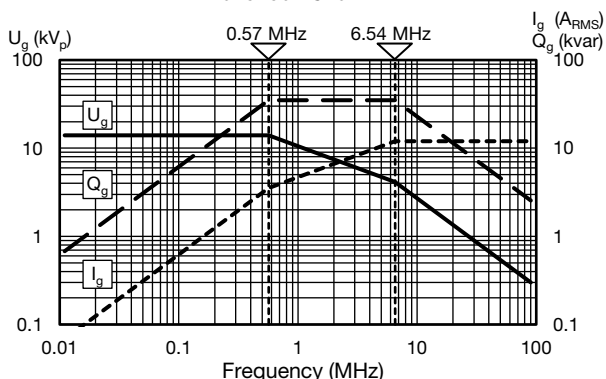
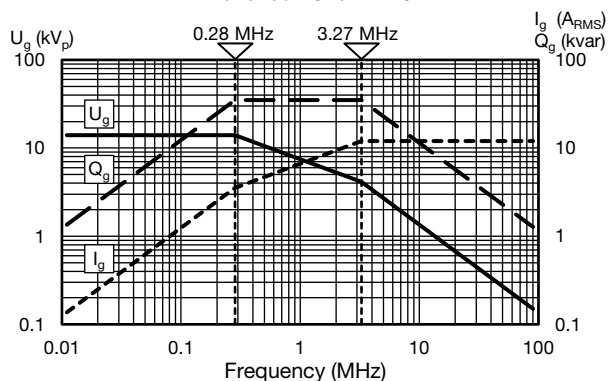
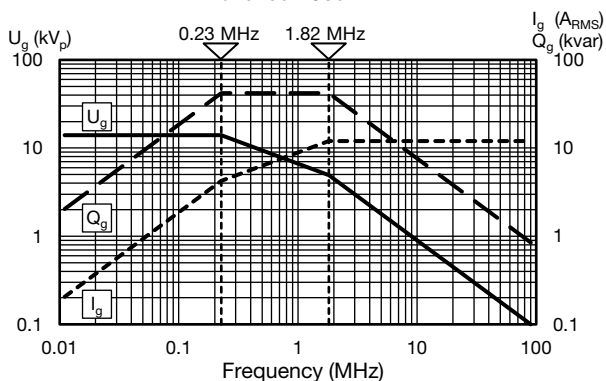
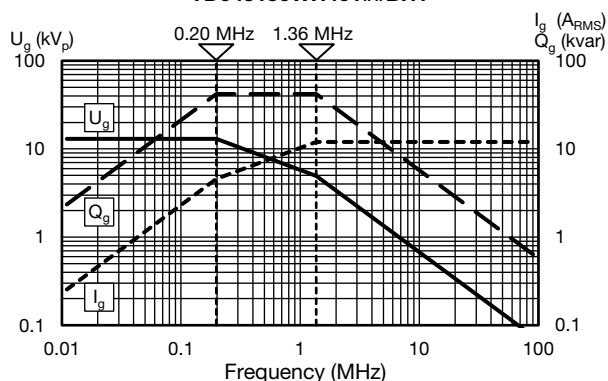
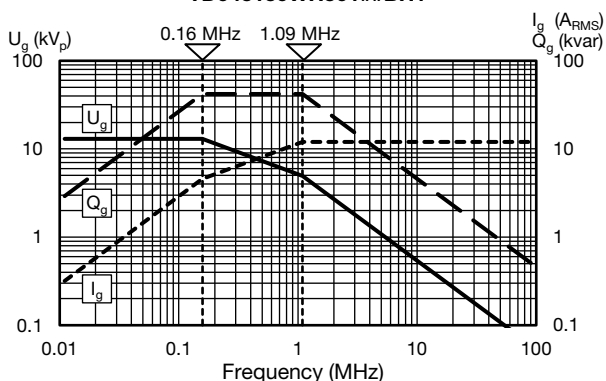
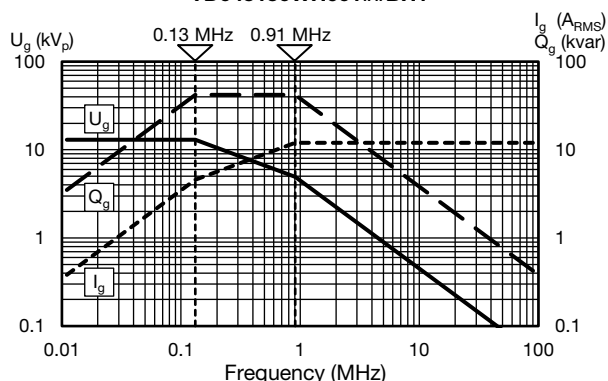
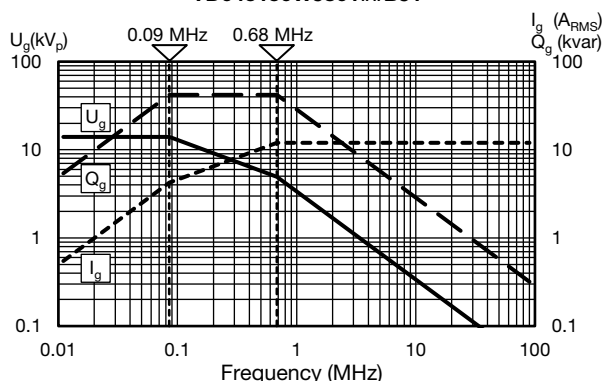
TYPE	TD 045090	TD 045120	TD 045150
Length L	97 (3.82)	127 (5.00)	157 (6.18)

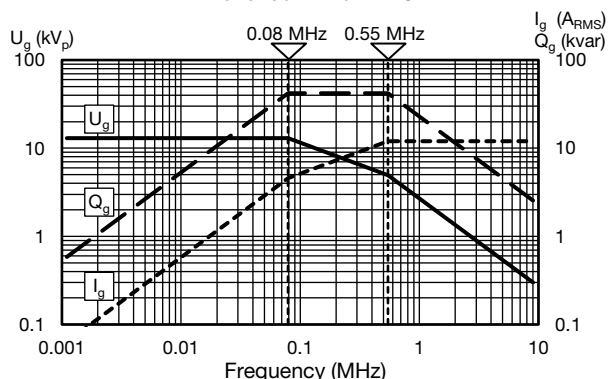
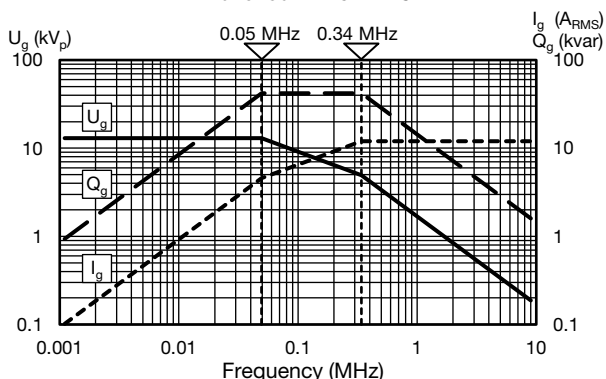
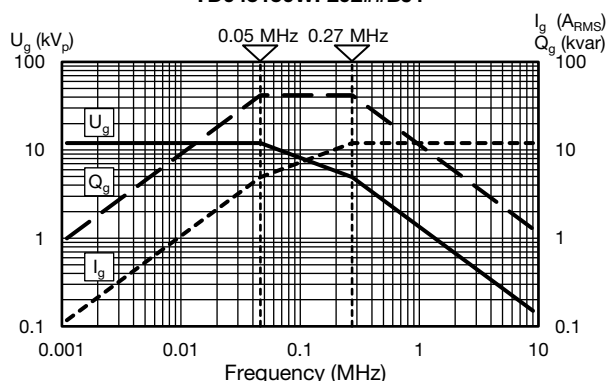
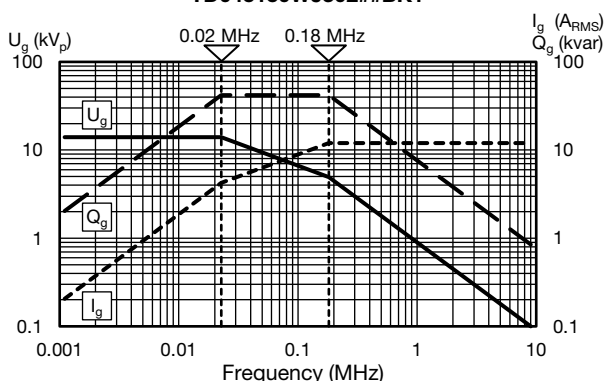
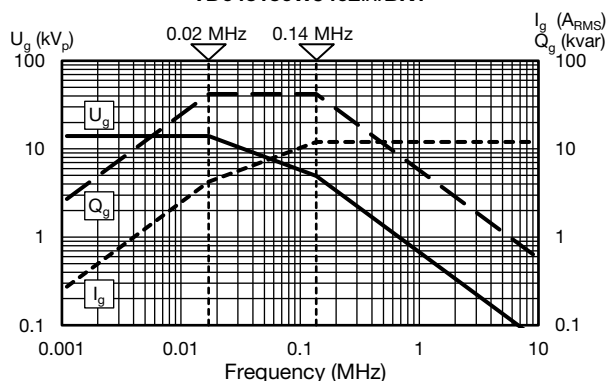
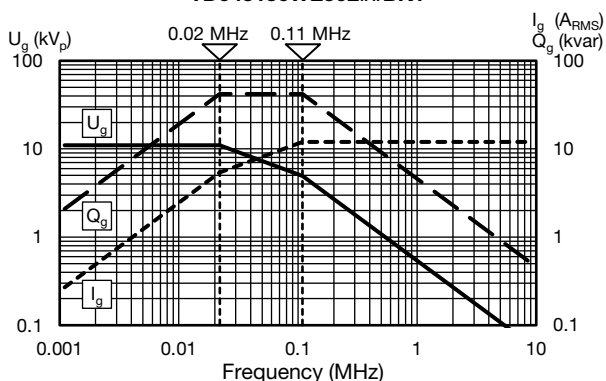
DERATING DIAGRAMS


DERATING DIAGRAMS


DERATING DIAGRAMS
TD045090BH162##BJ1

TD045090WC252##BJ1

TD045120WH500##BF1

TD045120WH600##BF1

TD045120WF800##BF1

TD045120WF101##BF1

TD045120WE161##BF1

TD045120WH251##BH1


DERATING DIAGRAMS


DERATING DIAGRAMS
TD045150WJ800##BF1

TD045150WJ101##BF1

TD045150WJ201##BG1

TD045150WJ301##BH1

TD045150WH401##BH1

TD045150WH501##BH1

TD045150WH601##BH1

TD045150WJ801##BJ1


DERATING DIAGRAMS
TD045150WH102##BJ1

TD045150WH162##BJ1

TD045150WF202##BJ1

TD045150WJ302##BK1

TD045150WJ402##BK1

TD045150WE502##BK1

RELATED DOCUMENTS

General Information

www.vishay.com/doc?22071



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