

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

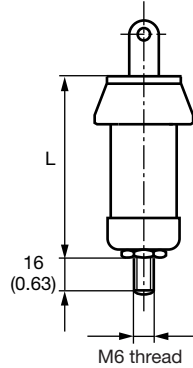


| SAP PART NUMBER AND ELECTRICAL DATA | | | | | | | |
|-------------------------------------|---------|------------------|----------------------------------|-----------------------------------|-----------------------------------|----|--|
| PART NUMBER | CERAMIC | CAP. VALUES (pF) | RATED VOLTAGE (kV _p) | RATED POWER ⁽¹⁾ (kvar) | RATED CURRENT (A _{rms}) | | |
| TYPE TD 045090 | | | | | | | |
| TD045090BH600##BF1 | R7 | 60 | 10 | 22 | 12 | | |
| TD045090BH800##BF1 | | 80 | | | | | |
| TD045090BH101##BF1 | | 100 | | | | | |
| TD045090BH161##BF1 | | 160 | | | | | |
| TD045090BH201##BG1 | R16 | 200 | | | | | |
| TD045090BH251##BG1 | | 250 | | | | | |
| TD045090BH301##BG1 | | 300 | | | | | |
| TD045090BH401##BH1 | R42 | 400 | | 9.0 | | 28 | |
| TD045090BH501##BH1 | | 500 | | | | | |
| TD045090BH601##BH1 | | 600 | | | | | |
| TD045090BH801##BJ1 | R85 | 800 | | | | | |
| TD045090BH102##BJ1 | | 1000 | | | | | |
| TD045090BH162##BJ1 | | 1600 | | | | | |
| TD045090WC252##BJ1 | | 2500 | | | | | |
| | | | | | | | |
| 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 | | | | | |
| 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 | |
| TD045150WH401##BH1 | | 400 | | | | | |
| TD045150WH501##BH1 | | 500 | | | | | |
| TD045150WH601##BH1 | R85 | 600 | 14 | 42 | | | |
| TD045150WJ801##BJ1 | | 800 | | | | | |
| TD045150WH102##BJ1 | | 1000 | | | | | |
| TD045150WH162##BJ1 | | 1600 | | | | | |
| TD045150WF202##BJ1 | | 2000 | | | | | |
| TD045150WJ302##BK1 | R230 | 3000 | 14 | | | | |
| TD045150WJ402##BK1 | | 4000 | | | | | |
| TD045150WE502##BK1 | | 5000 | | | | | |

Notes

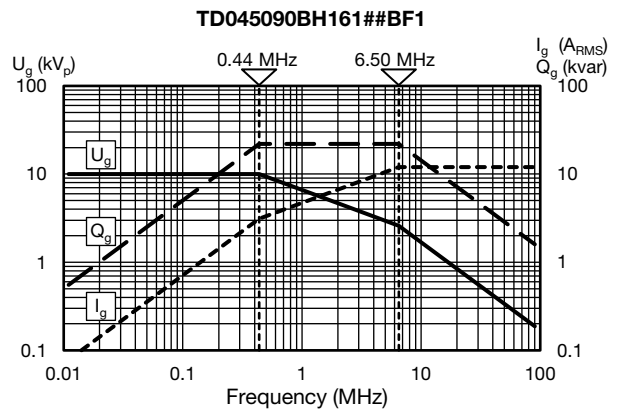
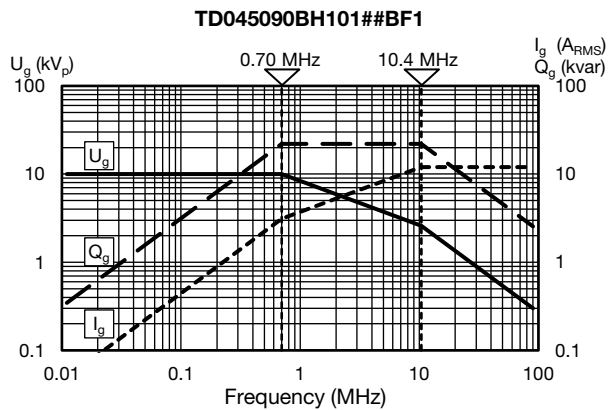
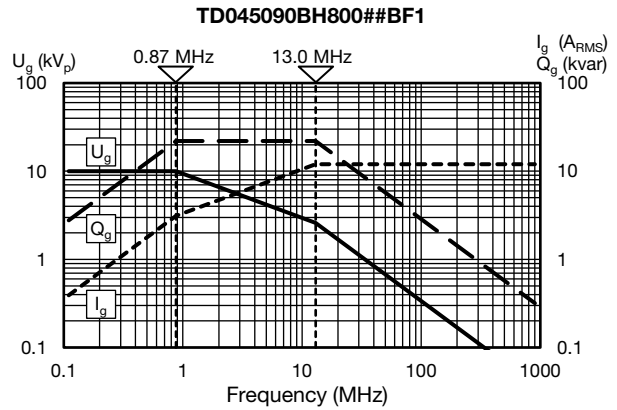
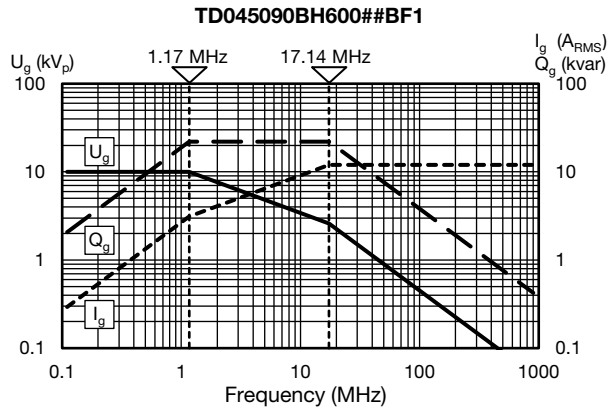
- ## 14th to 15th digit: capacitance tolerance code ± 20 % = 38, ± 10 % = 36, ± 5 % = 33
- (1) The surface temperature during operation must not exceed +100 °C

DIMENSIONS in millimeters (inches)



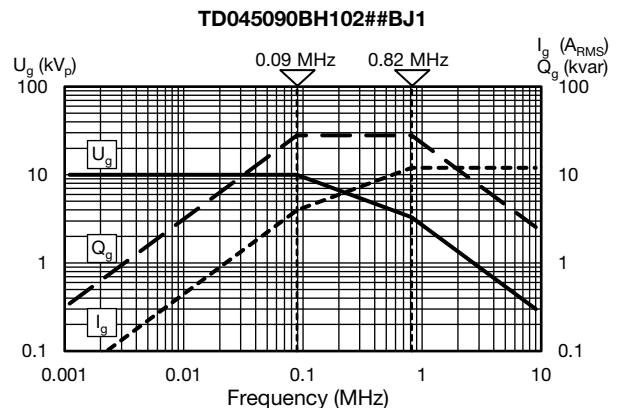
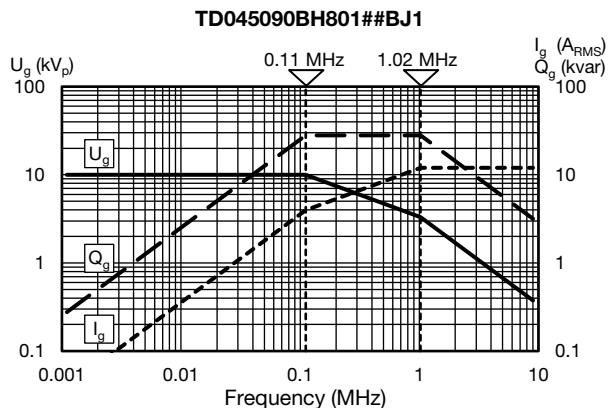
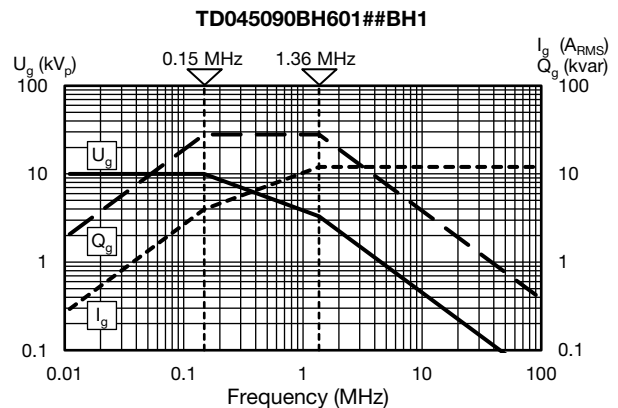
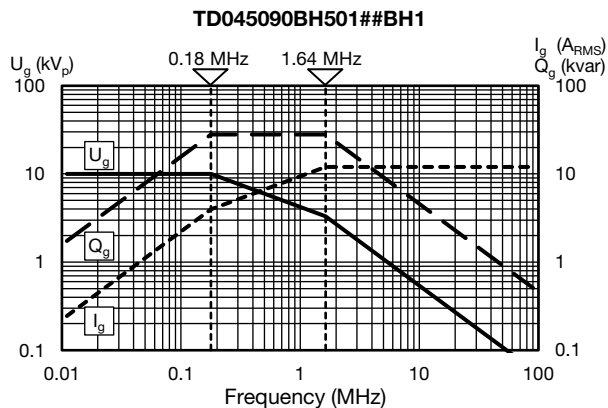
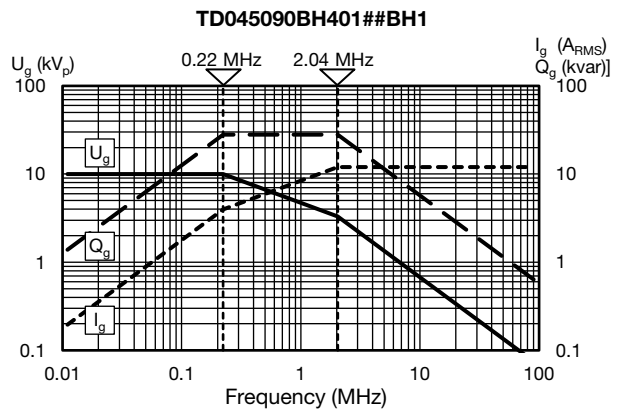
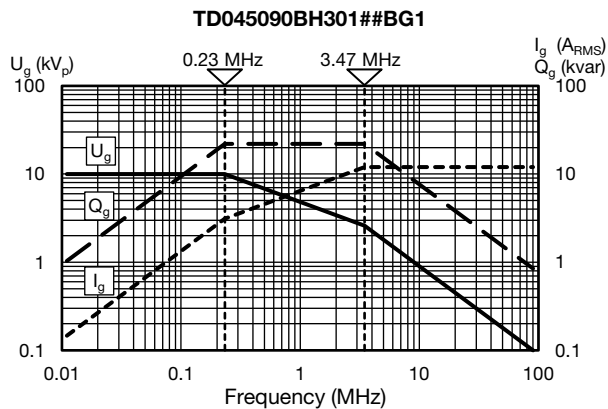
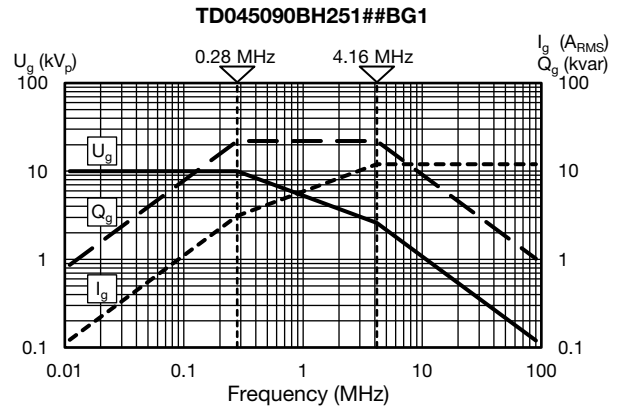
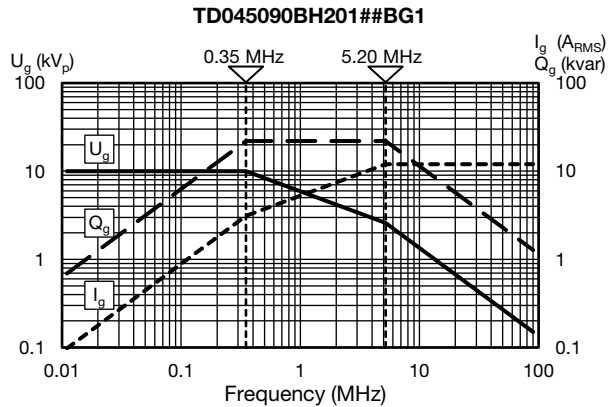
| TYPE | TD 045090 | TD 045120 | TD 045150 |
|----------|-----------|------------|------------|
| Length L | 97 (3.82) | 127 (5.00) | 157 (6.18) |

DERATING DIAGRAMS



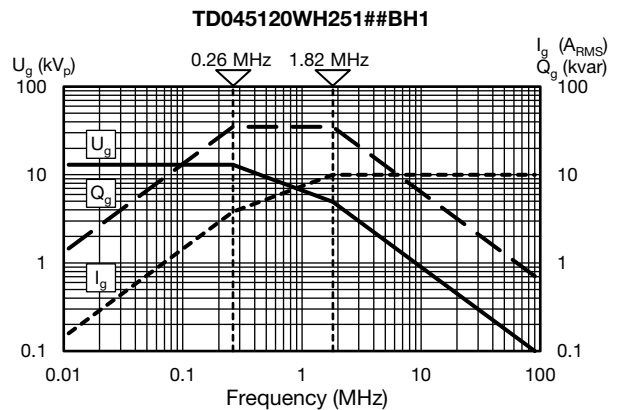
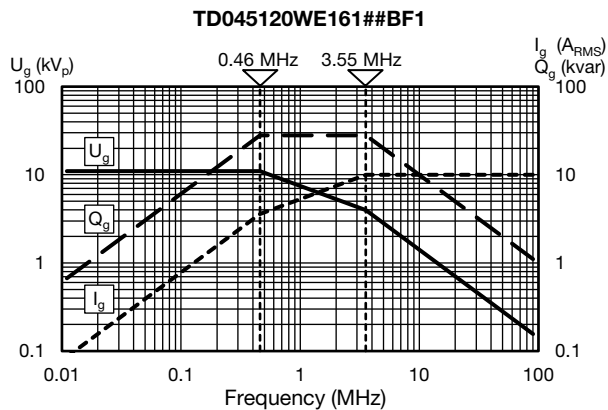
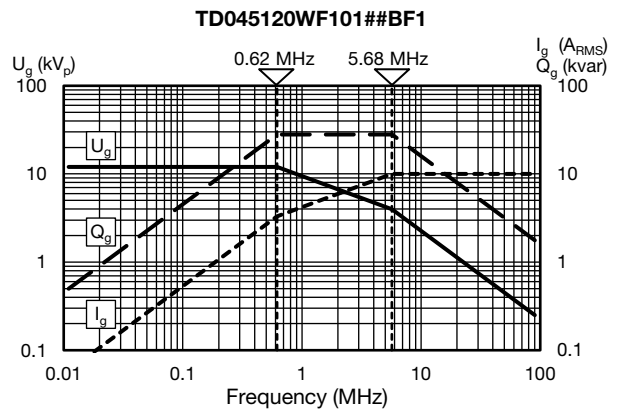
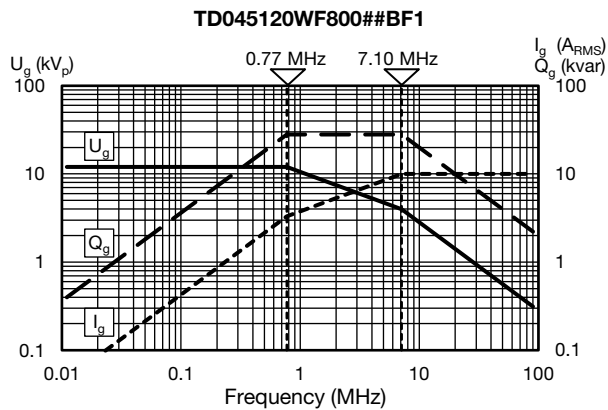
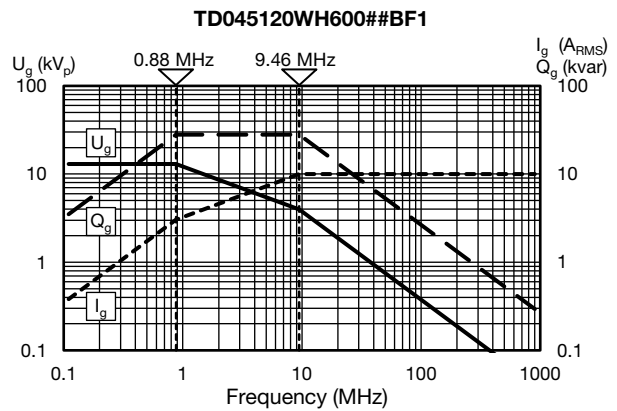
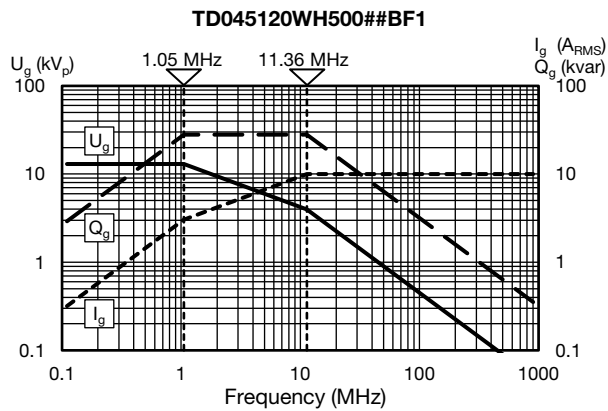
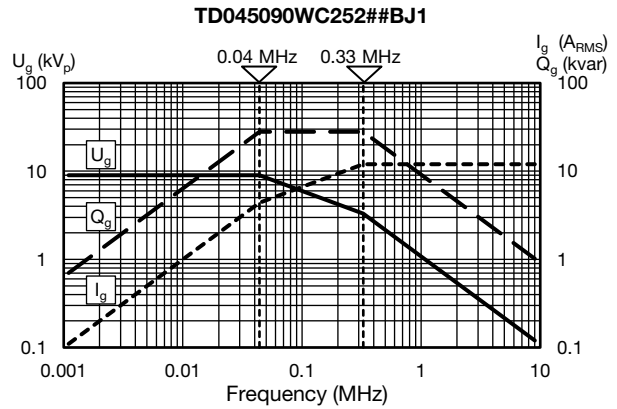
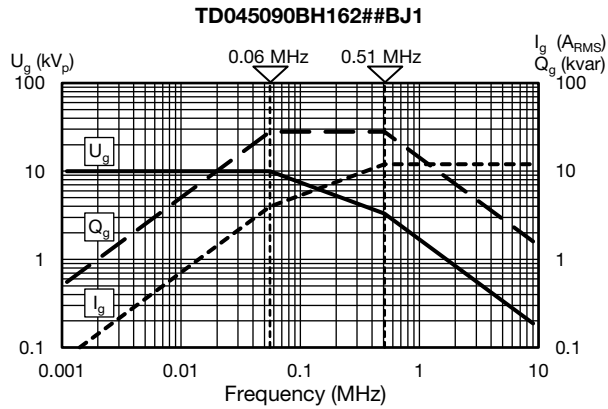


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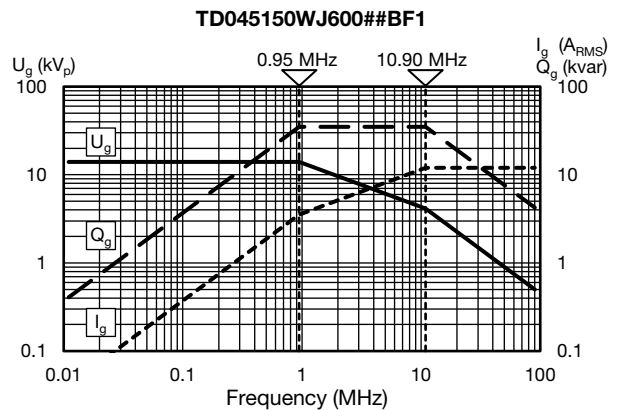
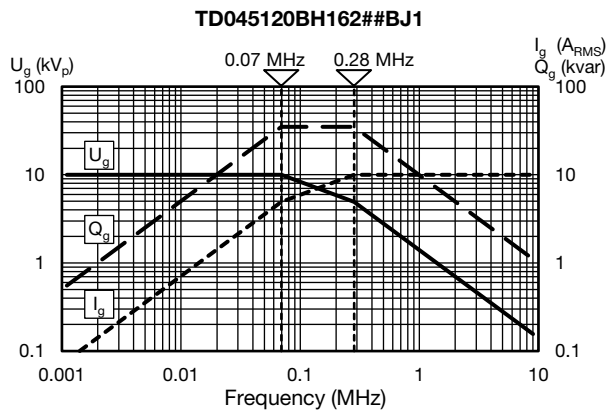
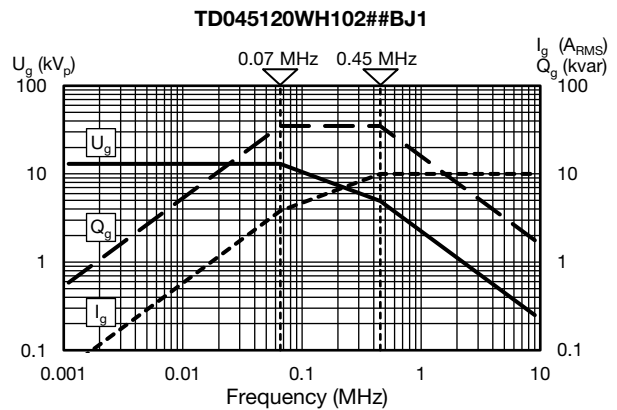
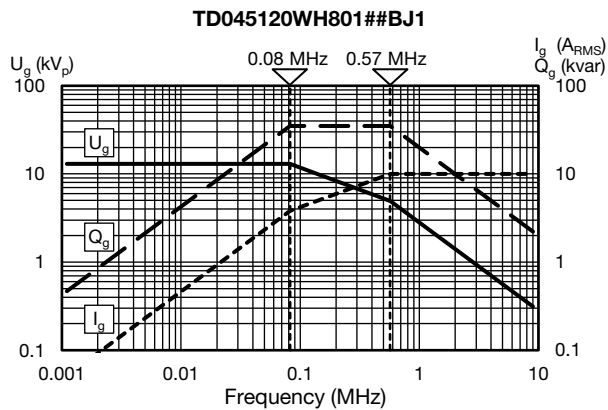
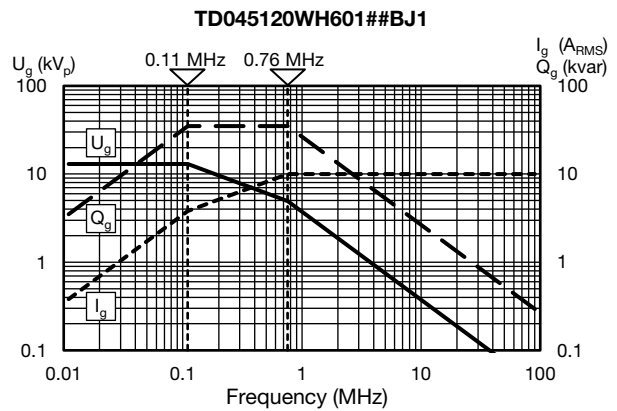
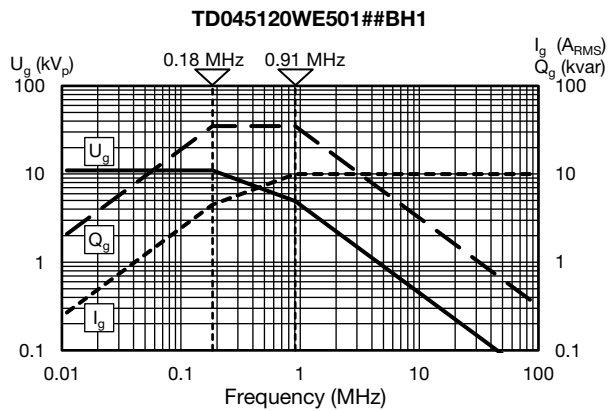
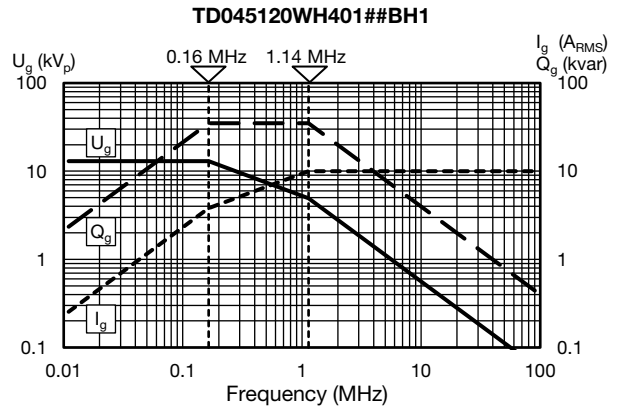
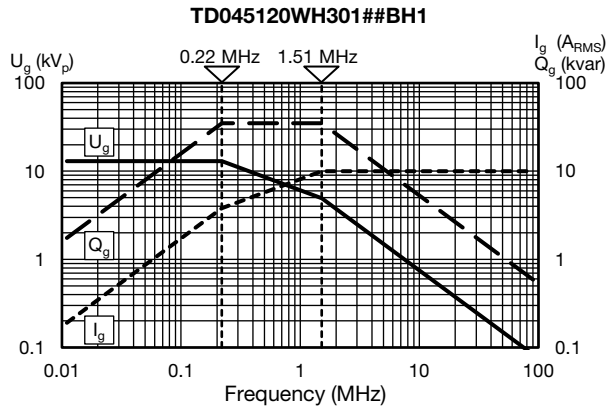


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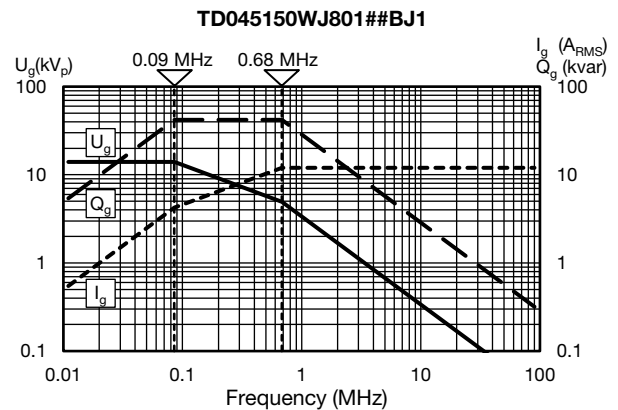
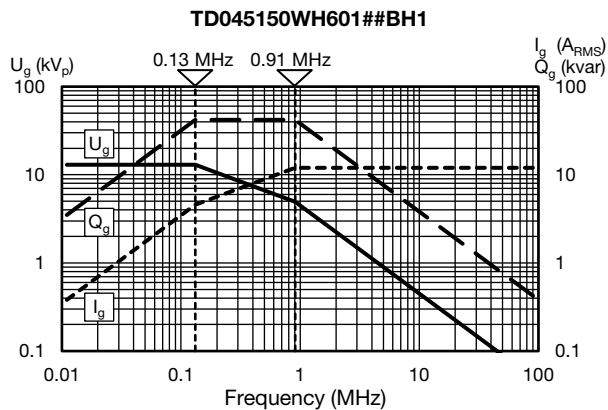
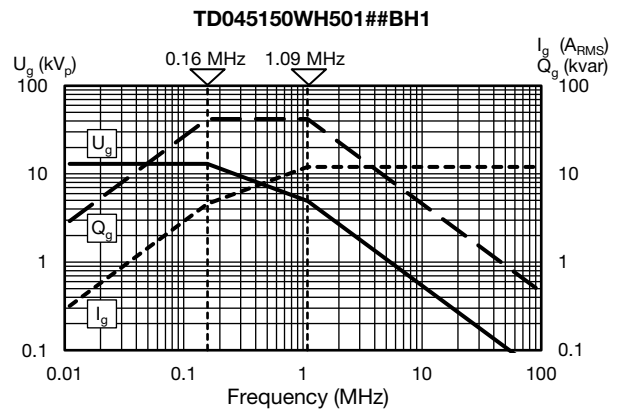
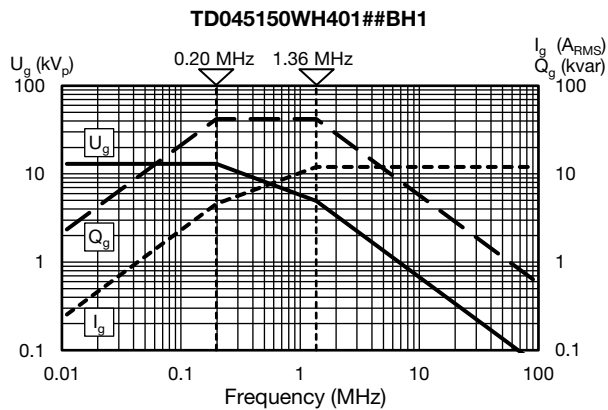
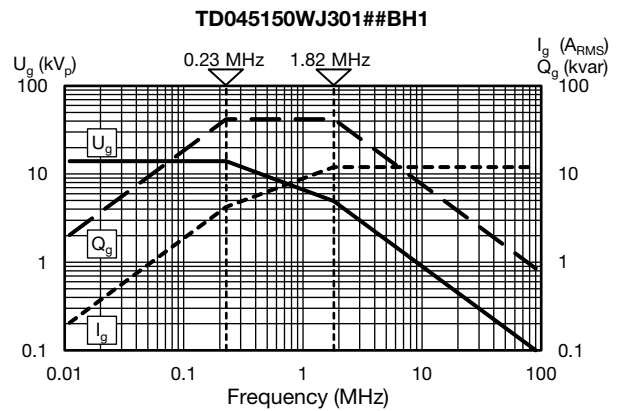
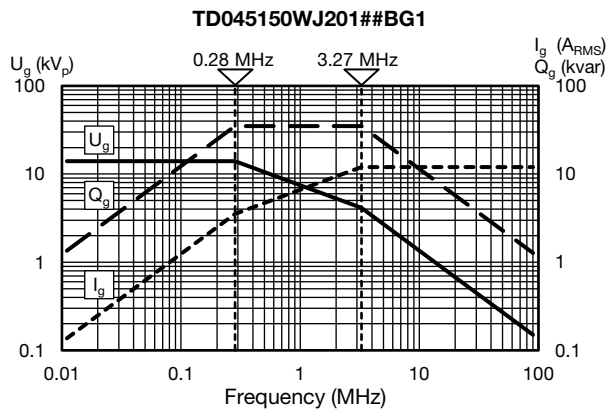
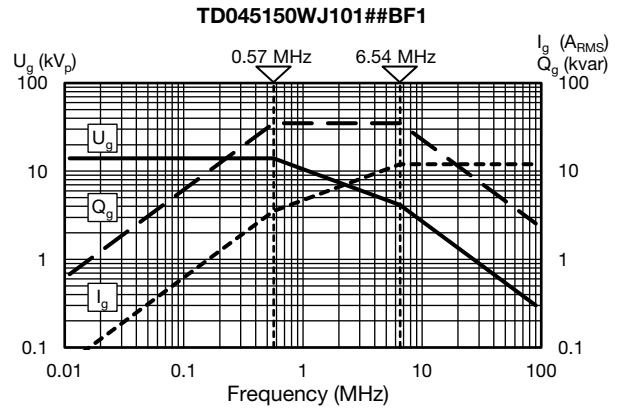
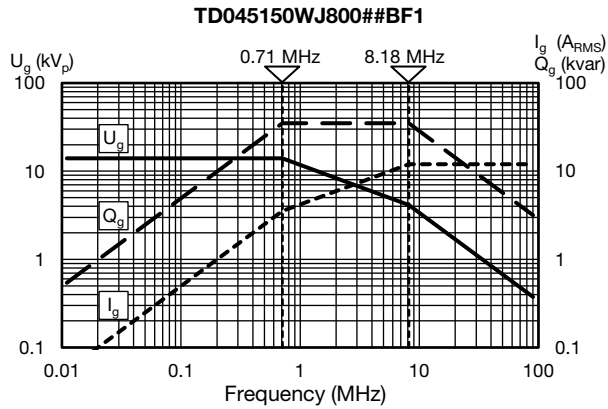


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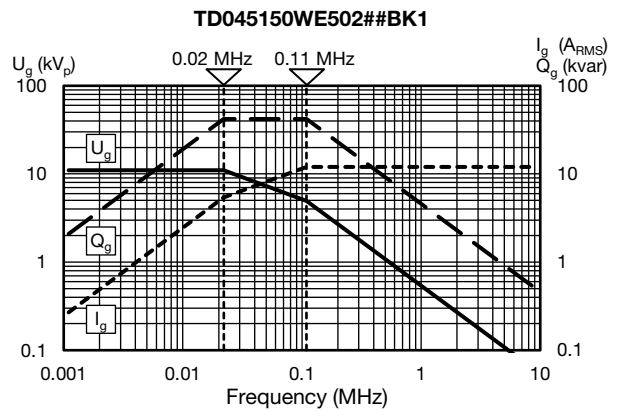
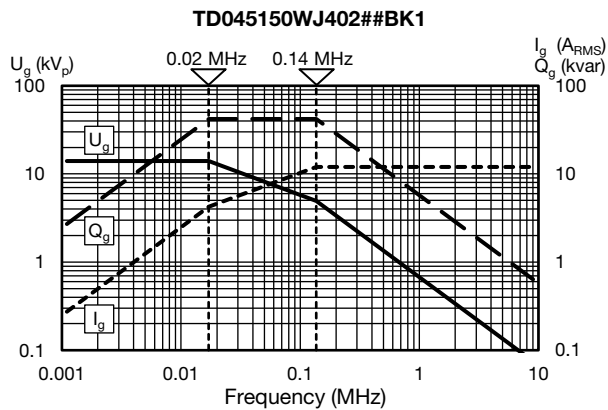
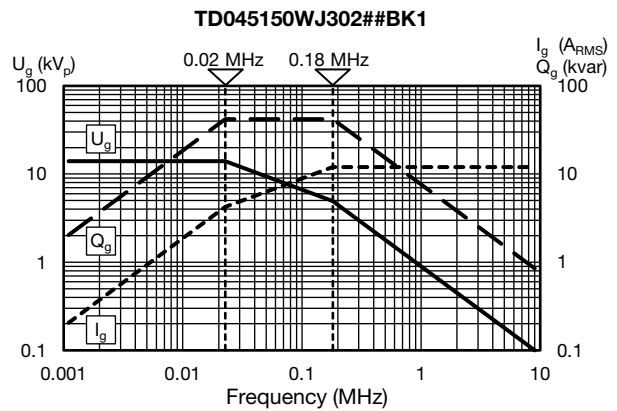
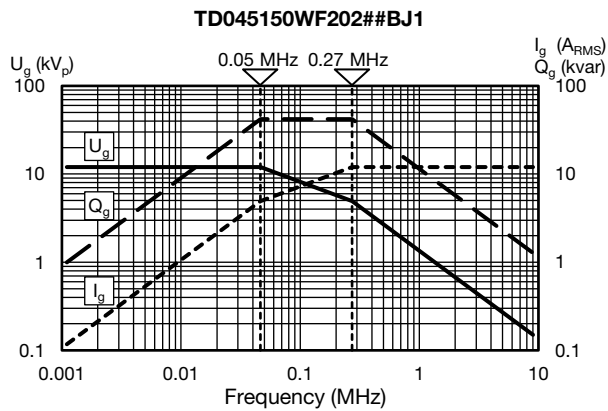
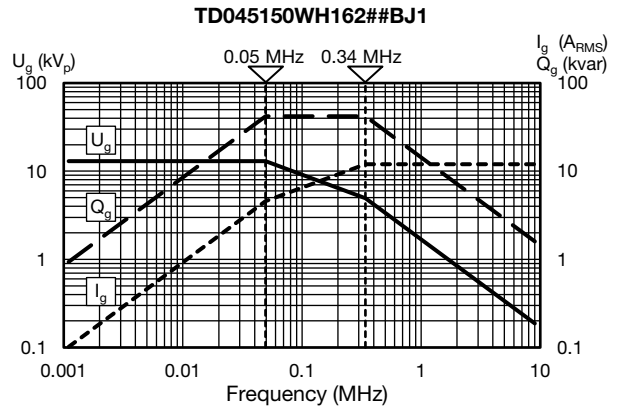
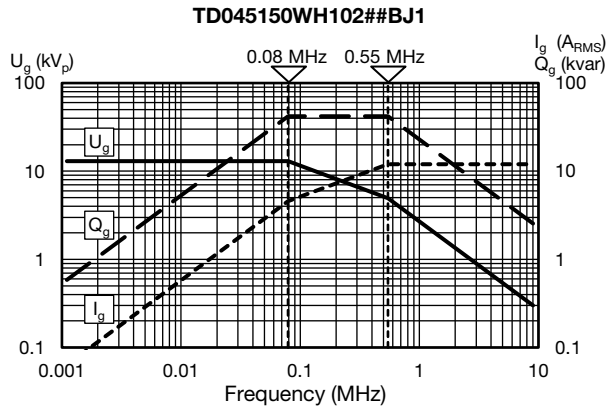


DERATING DIAGRAMS





DERATING DIAGRAMS



RELATED DOCUMENTS

General Information

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