

RF Power Pot Capacitors with Mounting Tags or Screw Terminals, Class 1 Ceramic



| QUICK REFERENCE DATA | | |
|---------------------------|--|--------|
| DESCRIPTION | VALUE | |
| Ceramic Class | 1 | |
| Ceramic Dielectric | R7, R16, R42, R85 | |
| Type | TA 030090 TB 030090 TD 030090 TE 030090 | |
| Voltage (V _p) | 9000 | 10 000 |
| Min. Capacitance (pF) | 1200 | 50 |
| Max. Capacitance (pF) | 1600 | 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

FEATURES

- High reliability
- Multiple terminals
- Wide range of capacitance values

APPLICATIONS

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

CAPACITANCE RANGE

50 pF to 1.6 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)

RATED VOLTAGE

- 9.0 kV_p
- 10.0 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: 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)

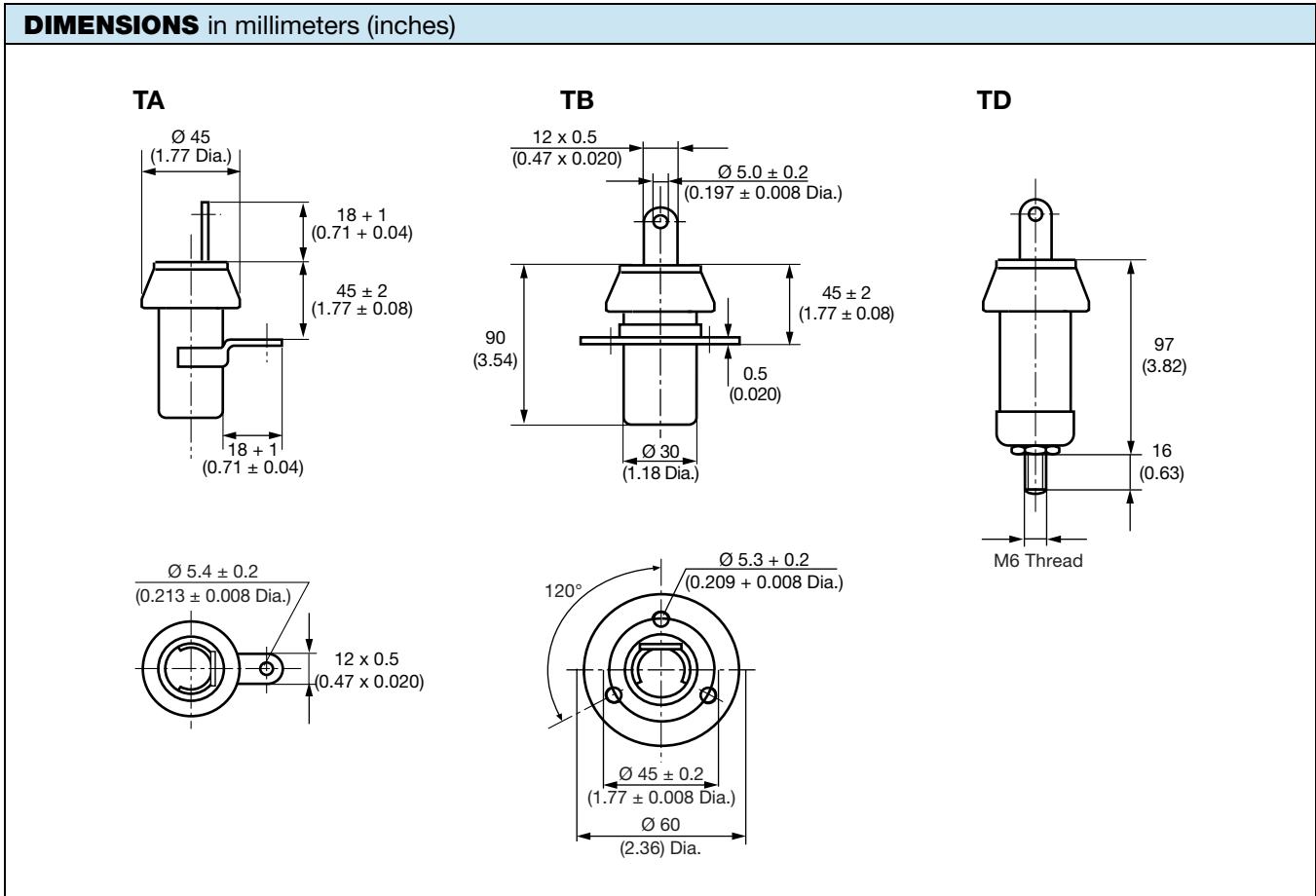
OPERATING TEMPERATURE RANGE

-55 °C to +100 °C

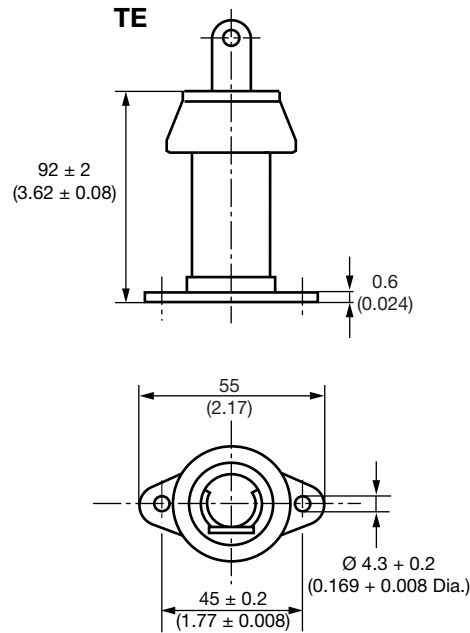
| SAP PART NUMBER AND ELECTRICAL DATA | | | | | |
|-------------------------------------|---------|------------------|----------------------------------|-----------------------------------|-----------------------------------|
| PART NUMBER | CERAMIC | CAP. VALUES (pF) | RATED VOLTAGE (kV _p) | RATED POWER ⁽¹⁾ (kvar) | RATED CURRENT (A _{RMS}) |
| T#030090BH500##BF1 | R7 | 50 | 10 | 14 | 9.0 |
| T#030090BH600##BF1 | | 60 | | | |
| T#030090BH800##BF1 | | 80 | | | |
| T#030090BH101##BG1 | R16 | 100 | | | |
| T#030090BH121##BG1 | | 120 | | | |
| T#030090BH161##BG1 | | 160 | | | |
| T#030090BH201##BH1 | R42 | 200 | | | |
| T#030090BH251##BH1 | | 250 | | | |
| T#030090BH301##BH1 | | 300 | | | |
| T#030090BH401##BH1 | | 400 | | | |
| T#030090BH501##BJ1 | | R85 | | 500 | |
| T#030090BH601##BJ1 | 600 | | | | |
| T#030090BH801##BJ1 | 800 | | | | |
| T#030090BH102##BJ1 | 1000 | | | | |
| T#030090WC122##BJ1 | 1200 | | | 9.0 | |
| T#030090WC162##BJ1 | 1600 | | | | |

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

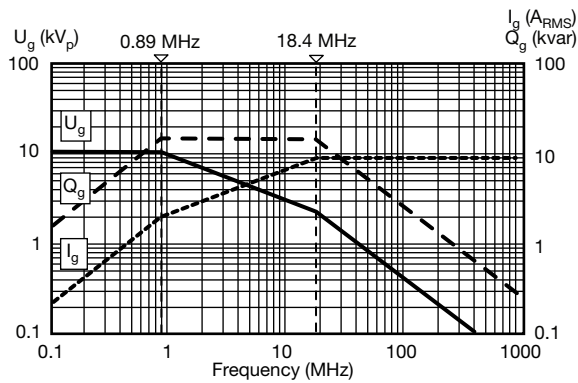


DIMENSIONS in millimeters (inches)

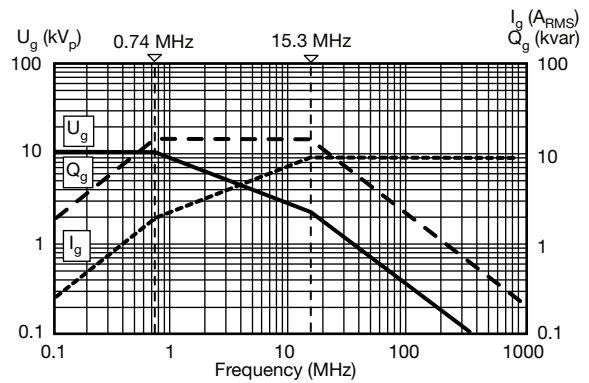


DERATING DIAGRAMS

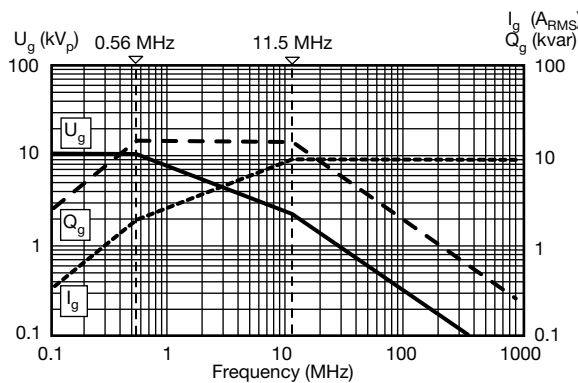
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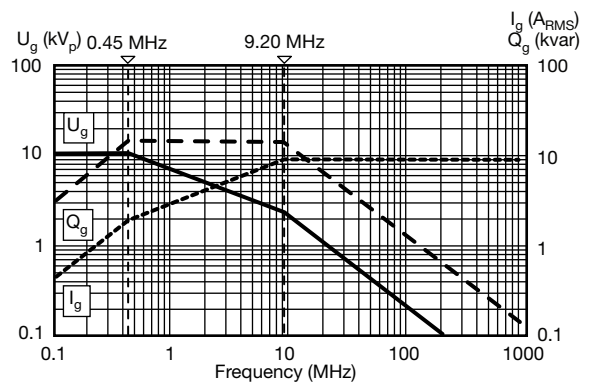
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T#030090BH800##BF1

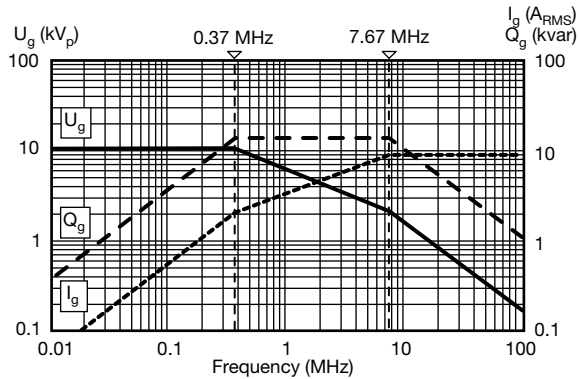


T#030090BH101##BG1

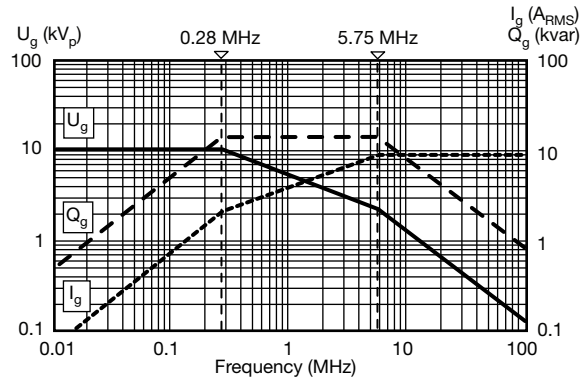


DERATING DIAGRAMS

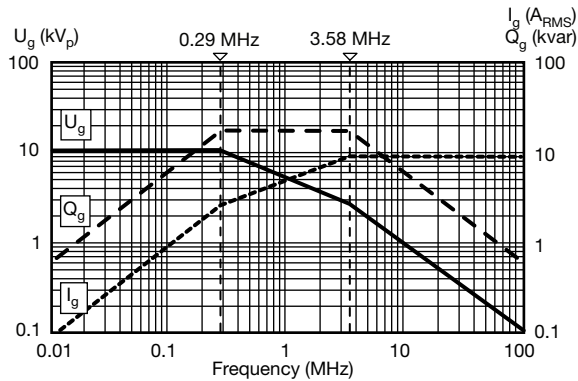
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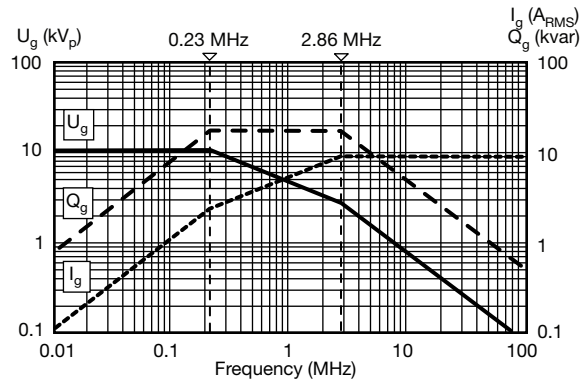
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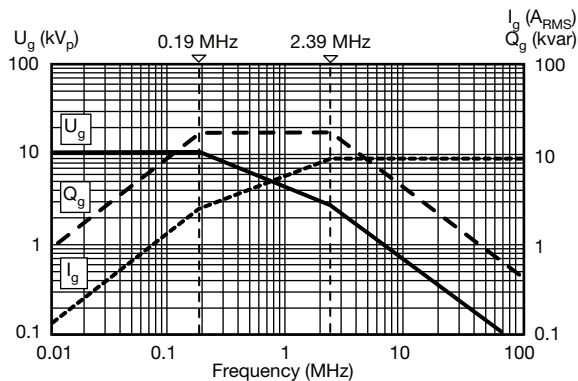
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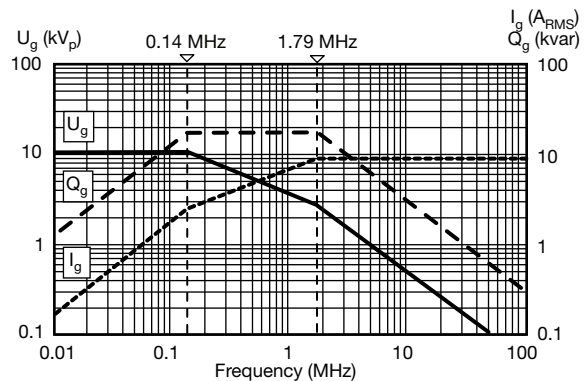
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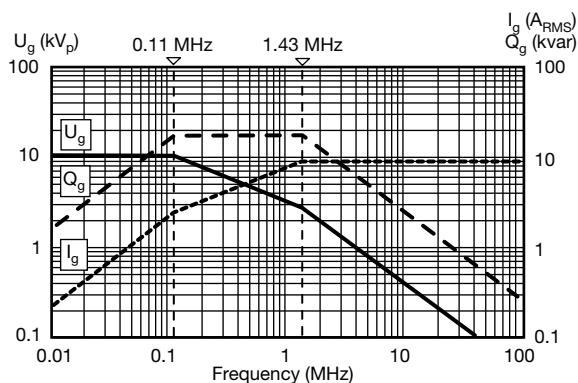
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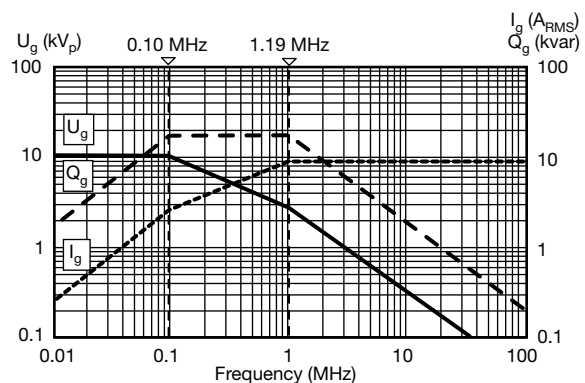
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T#030090BH501##BJ1



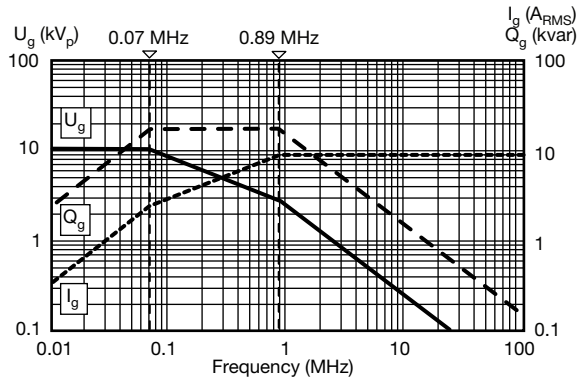
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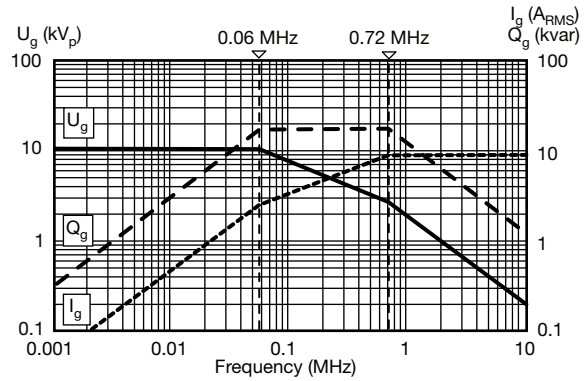


DERATING DIAGRAMS

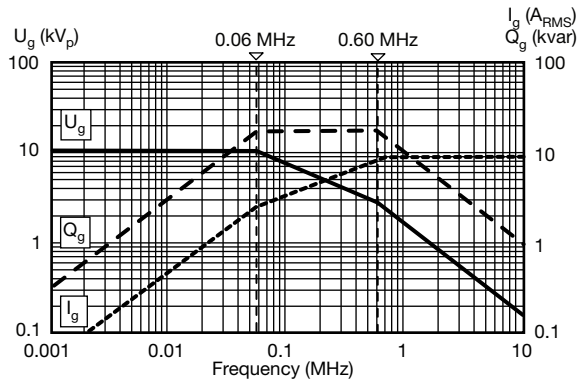
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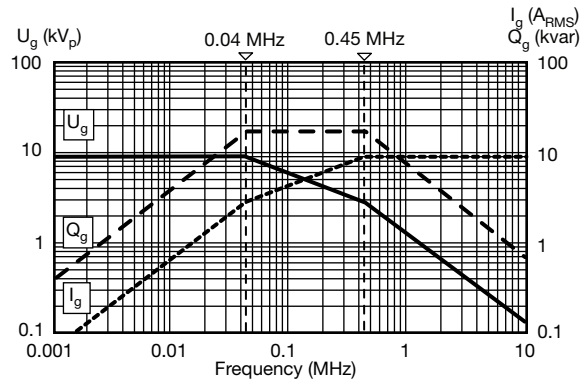
T#030090BH102##BJ1



T#030090WC122##BJ1



T#030090WC162##BJ1



RELATED DOCUMENTS

General Information

www.vishay.com/doc?22071



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