# RF Power Pot Capacitors with Mounting Tags, Class 1 Ceramic

| QUICK REFERENCE DATA | | | | |
|---|---|---|---|---|
| DESCRIPTION | VALUE | | | |
| Ceramic Class | 1 | | | |
| Ceramic Dielectric | R7, R42, R85 | | | |
| Type | TA 085120, TB 085120, TE 085120 | | | |
| Voltage ($V_p$) | 10 000 | 12 000 | 13 000 | 15 000 |
| Min. Capacitance (pF) | 400 | 250 | 2000 | 100 |
| Max. Capacitance (pF) | 4000 | 2500 | 2000 | 1600 |
| 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

100 pF to 4.0 nF

## CAPACITANCE TOLERANCE

± 20 %; ± 10 %; ± 5 %

## CERAMIC DIELECTRICS

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

## RATED VOLTAGE

- 10.0 $kV_p$
- 12.0 $kV_p$
- 13.0 $kV_p$
- 15.0 $kV_p$

## DIELECTRIC STRENGTH TEST

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

## DISSIPATION FACTOR

R7: max. 0.07 %
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 ($A_{RMS}$) |
|---|---|---|---|---|---|
| T#085120BJ101##BF1 | R7 | 100 | 15 | 56 | 15 |
| T#085120BJ161##BF1 | | 160 | | | |
| T#085120WF251##BF1 | | 250 | 12 | | |
| T#085120BH401##BF1 | | 400 | 10 | | |
| T#085120BJ501##BH1 | R42 | 500 | 15 | 70 | |
| T#085120BJ601##BH1 | | 600 | | | |
| T#085120WF801##BH1 | | 800 | 12 | | |
| T#085120WF102##BH1 | | 1000 | | | |
| T#085120BJ162##BJ1 | R85 | 1600 | 15 | | |
| T#085120WH202##BJ1 | | 2000 | 13 | | |
| T#085120WF252##BJ1 | | 2500 | 12 | | |
| T#085120BH402##BJ1 | | 4000 | 10 | | |

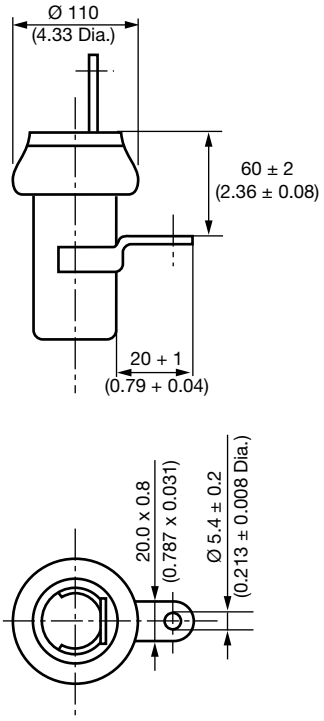
**Notes**

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

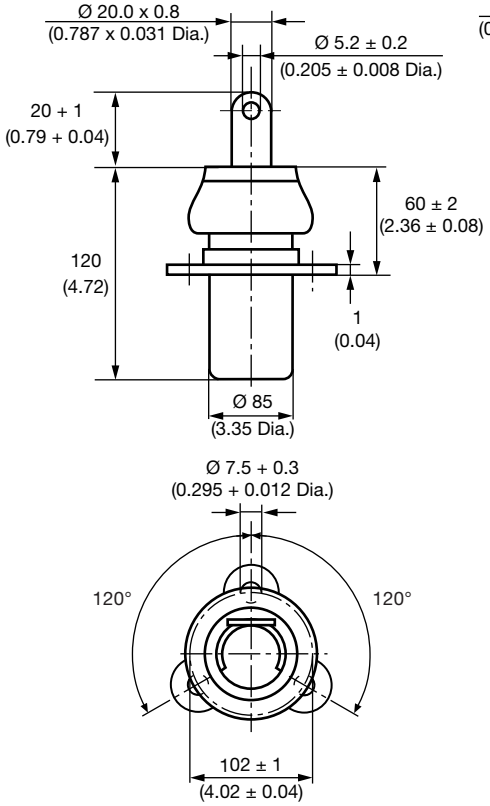
(1) The surface temperature during operation must not exceed +100 °C

## DIMENSIONS in millimeters (inches)

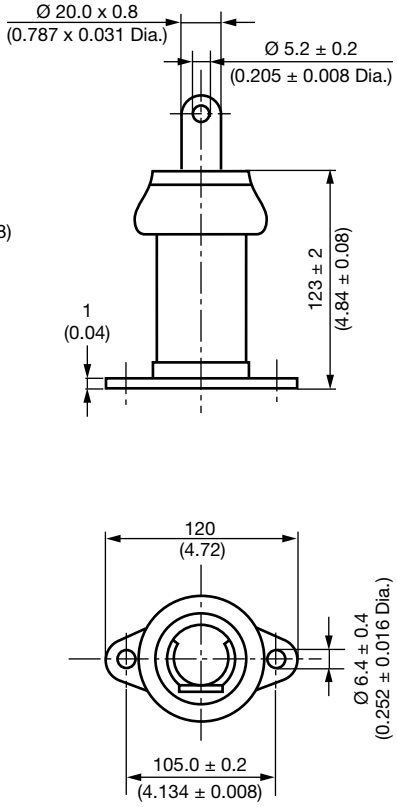
**TA**




**TB**




**TE**



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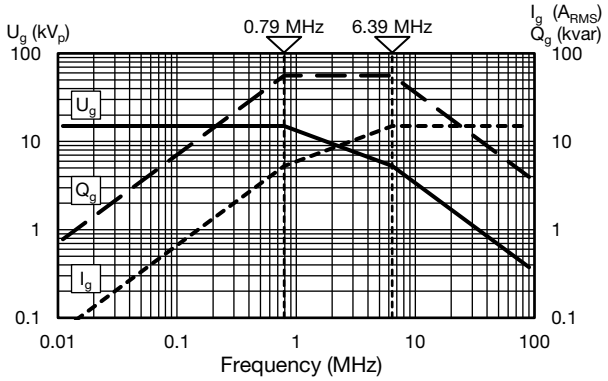
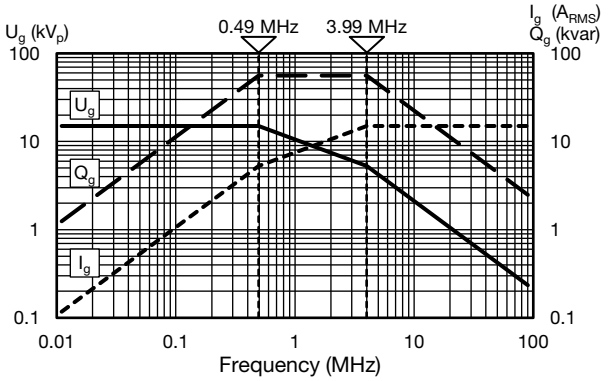
## DERATING DIAGRAMS

**T#085120BJ101##BF1**




**T#085120BJ161##BF1**

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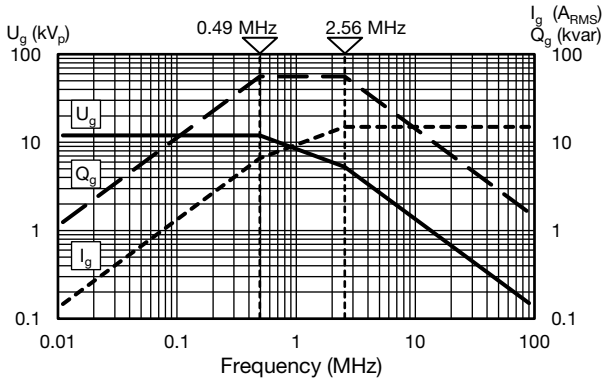


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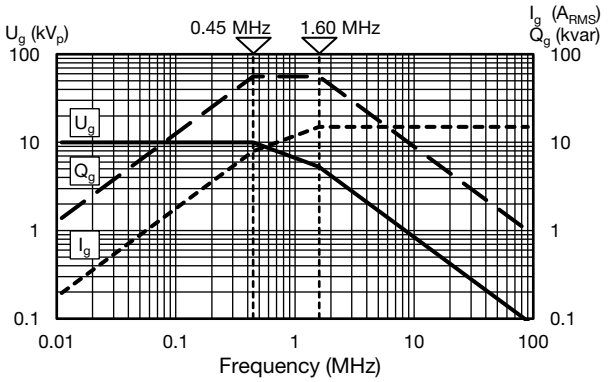


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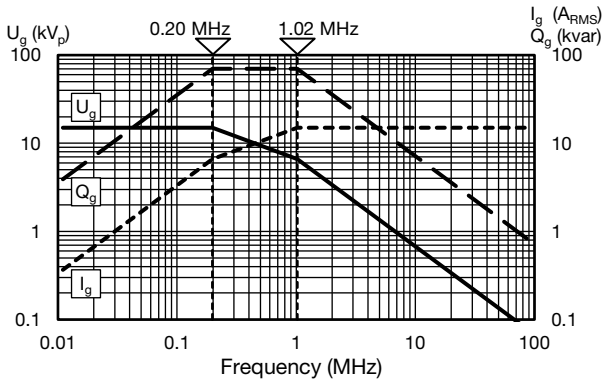


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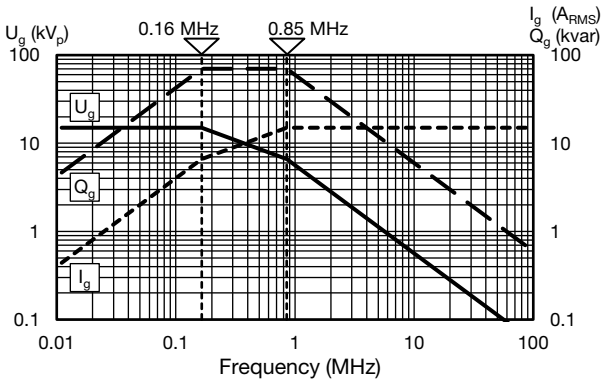


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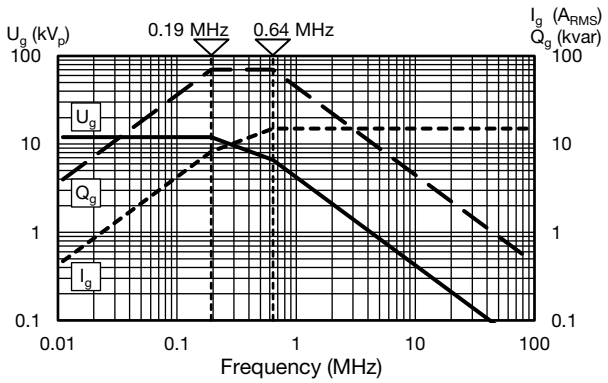


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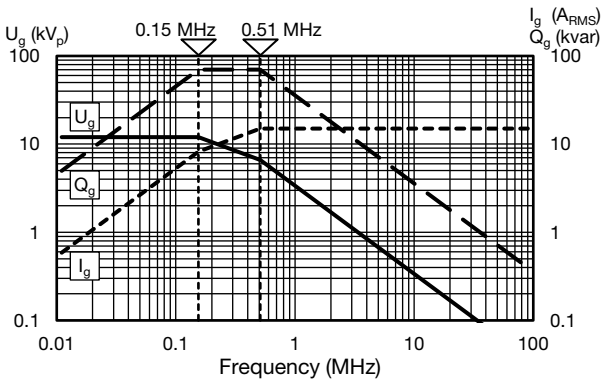



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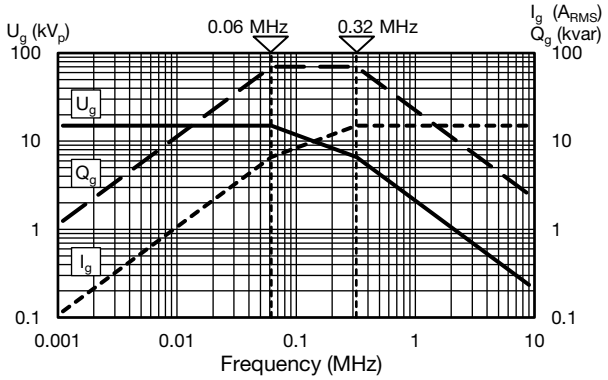
## DERATING DIAGRAMS

**T#085120BJ162##BJ1**

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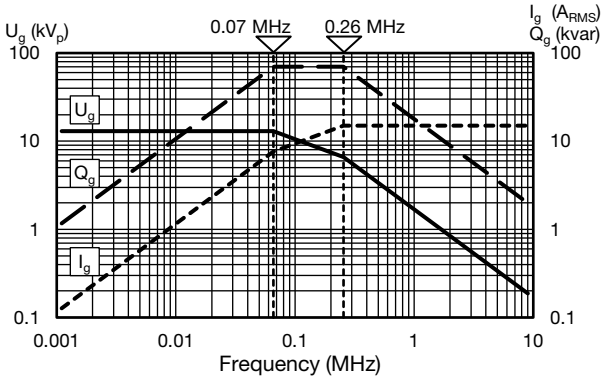


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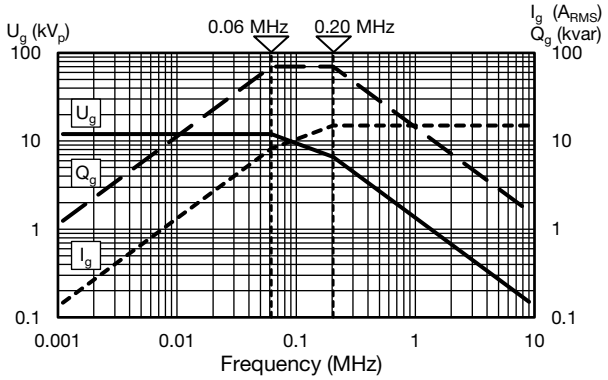


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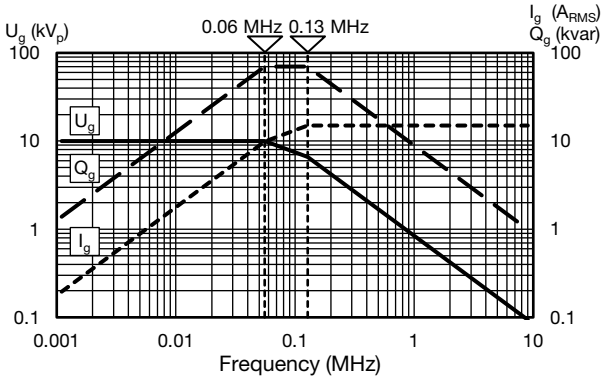


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