



RF Power Barrel Capacitors, Class 1 Ceramic



| QUICK REFERENCE DATA | | | | | |
|----------------------------|--|--|--|--|--|
| DESCRIPTION | VALUE | | | | |
| Ceramic Class | 1 | 1 | | | |
| Ceramic Dielectric | NP0 (C0G) | N750 (U2J) | | | |
| Туре | 5FCA, 5FDA, 5FEA, 5FFA, 5FGA, 5FHA | 5FCU, 5FDU, 5FEP, 5FFU, 5FGU, 5FHU | | | |
| Voltage (V _{DC}) | 5000 | 5000 | | | |
| Min. Capacitance (pF) | 3.0 | 10 | | | |
| Max. Capacitance (pF) | 20 | 40 | | | |
| Mounting | Axial or screw terminal | | | | |

MATERIAL

Capacitor elements made from class 1 ceramic dielectric with noble metal electrodes.

Connection terminals:

- Axial wire leads, tinned copper (style FC., FD., FE.)
- Thread terminal, brass, tin plated (style FF., FG., FH.)

Allowable torque: 0.34 Nm (3.0 lbf in)

FINISH

Capacitor body completely protective lacquered.

MARKING

Type designator, capacitance value and tolerance, rated peak voltage, ceramic material code, production date code, manufacturer logo.

FEATURES

- Very small size make it well suited in mobile equipment
- Geometry minimizes inductance, optimizes voltage withstand and maximizes heat radiation
- Available with thread terminals or solderable wire leads

APPLICATIONS

- Radio communication equipment
- · Small broadcasting equipment
- RF power supply

CAPACITANCE RANGE

3.0 pF to 40 pF

CAPACITANCE TOLERANCE

 $< 5 pF: \pm 0.25 pF; \pm 0.5 pF$ $\geq 5 pF: \pm 10 \%; \pm 5 \%$

CERAMIC DIELECTRICS

- NP0 (C0G)
- N750 (U2J)

RATED VOLTAGE

 5.0 kV_{DC}

DIELECTRIC STRENGTH TEST

150 % of rated DC voltage

DISSIPATION FACTOR

Max. 0.2 % (1 MHz)

INSULATION RESISTANCE

Min. 100 000 M Ω (at 25 °C)

OPERATING TEMPERATURE RANGE

-55 °C to +100 °C

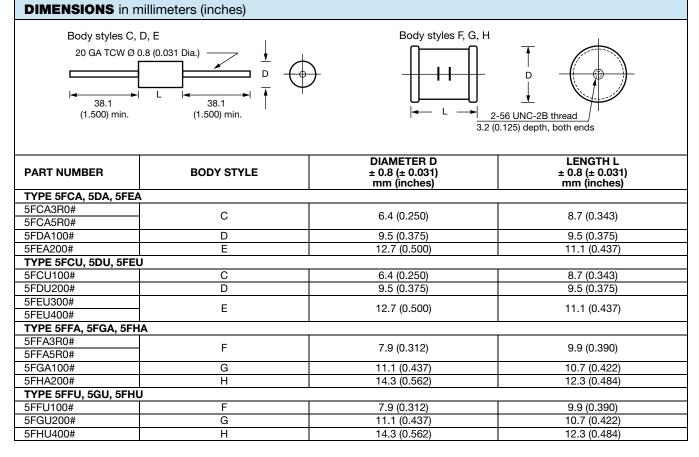




| SAP PART NUMBER AND ELECTRICAL DATA | | | | | |
|-------------------------------------|---------------|------------------------|---|---|---|
| PART NUMBER | CERAMIC | CAP. VALUES (pF) | RATED VOLTAGE (kV _{DC}) | RATED POWER ⁽¹⁾ (kvar) | RATED CURRENT (A _{RMS}) |
| TYPE 5FCA, 5DA, 5FEA | 1 | | | | |
| 5FCA3R0# | NP0 | 3.0 | 5.0 | 2.3 | 1.5 |
| 5FCA5R0# | | 5.0 | | 3.8 | 1.6 |
| 5FDA100# | (C0G) | 10 | | 4.2 | 2.3 |
| 5FEA200# | | 20 | | 7.6 | 3.4 |
| TYPE 5FCU, 5DU, 5FEU | J | | | | |
| 5FCU100# | N750 (U2J) | 10 | 5.0 | 2.3 | 1.5 |
| 5FDU200# | | 20 | | 3.8 | 1.6 |
| 5FEU300# | | 30 | | 4.0 | 2.0 |
| 5FEU400# | | 40 | | 4.2 | 2.3 |
| TYPE 5FFA, 5FGA, 5FH | IA | | | | |
| 5FFA3R0# | | 3.0 | 5.0 | 2.3 | 1.5 |
| 5FFA5R0# | NP0 (C0G) | 5.0 | | 3.8 | 1.6 |
| 5FGA100# | | 10 | | 4.2 | 2.3 |
| 5FHA200# | | 20 | | 7.6 | 3.4 |
| TYPE 5FFU, 5GU, 5FHU | J | | | | |
| 5FFU100# | N750 (U2J) | 10 | | 2.3 | 1.5 |
| 5FGU200# | | 20 | 5.0 | 3.8 | 1.6 |
| 5FHU400# | | 40 | | 4.2 | 2.3 |

Notes

- #8th digit of the part number: capacitance tolerance code \pm 0.25 pF = C, \pm 0.5 pF = D, \pm 5 % = J, \pm 10 % = K
- (1) At rated voltage. Data presented is based on a minimum body temperature rise of 30 °C at +25 °C



| RELATED DOCUMENTS | |
|---------------------|--------------------------|
| General Information | www.vishay.com/doc?22071 |



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