

Barrel Type, Screw Terminal or Axial Leaded RF Power Capacitors

DESIGN

Vishay Cera-Mite RF duty high voltage capacitors are designed to be used in circuits which operate at radio frequency. They are capable of handling high RF currents and voltages. Geometry minimizes inductance, optimizes voltage withstand and maximizes heat radiation.

DIELECTRIC STRENGTH

150 % of rated DC voltage

INSULATION RESISTANCE

100 000 M Ω

DISSIPATION FACTOR

0.1 % to 0.2 % for NP0 and N750. 0.5 % for X5U

ENVIRONMENTAL DESIGN CRITERIA

EIA 198

FEATURES

- RF power
- Barrel type construction
- Screw terminal or axial leads

APPLICATIONS

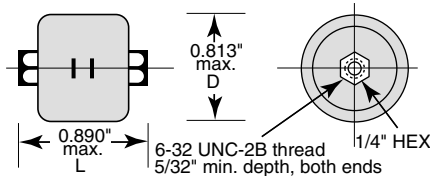
- Radio transmitters
- Antenna couplers
- Induction heaters

MARKING

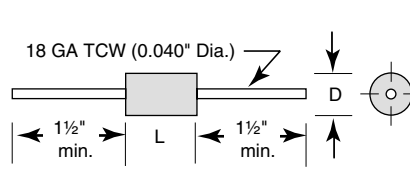
Type designator, capacitance value, tolerance, rated voltage, production date code, CM logo

5 kV_{DC} and 7.5 kV_{DC} - 1.5 A to 10 A

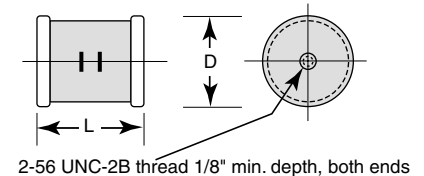
Body style A



Body style C, D and E



Body styles F, G and H



CAPACITANCE RANGE BY TEMPERATURE CHARACTERISTIC						
CERA-MITE BODY STYLE	LENGTH ± 0.031 " (INCH)	DIA. ± 0.031 " (INCH)	kV _{DC}	NP0	N750	X5U
A	0.890 max.	0.813 max.	5 to 7.5	5 pF to 65 pF	50 pF to 150 pF	-
A	0.890 max.	0.813 max.	5	-	-	500 pF to 1000 pF
C	0.343	0.250	5	1 pF to 7 pF	8 pF to 10 pF	-
D	0.375	0.375	5	5 pF to 10 pF	15 pF to 25 pF	-
E	0.437	0.500	5	7 pF to 30 pF	34 pF to 45 pF	-
F	0.390	0.312	5	1 pF to 7 pF	8 pF to 10 pF	-
G	0.422	0.437	5	5 pF to 10 pF	15 pF to 25 pF	-
H	0.484	0.562	5	7 pF to 30 pF	34 pF to 45 pF	-

TYPICAL APPLICATION DATA FOR POPULAR CAPACITANCE VALUES

VALUE	T.C. (2)	STD. CAP. TOLERANCE	BODY STYLE	CERA-MITE PART NUMBER	MAX. AC (V) (PEAK kV)	MAX. AC CURRENT (RMS) (A)	MAX. VA (kVAR) (1)
25 pF	NP0	± 10 %	A	7FAA250K	7.5	5.5	7.0
50 pF	NP0	± 10 %	A	7FAA500K	7.5	8.0	8.0
50 pF	N750	± 10 %	A	7FAU500K	7.5	8.0	8.0
75 pF	N750	± 10 %	A	7FAU750K	7.5	9.0	8.0
100 pF	N750	± 10 %	A	7FAU101K	7.5	9.2	9.0
1000 pF	X5U	± 20 %	A	5FAE102M	5.0	3.7	0.2
3 pF	NP0	± 10 %	C	5FCA3R0K	5.0	1.5	2.3
5 pF	NP0	± 10 %	C	5FCA5R0K	5.0	1.6	3.8
10 pF	N750	± 10 %	C	5FCU100K	5.0	2.3	4.2
10 pF	NP0	± 10 %	D	5FDA100K	5.0	2.3	4.2
20 pF	N750	± 10 %	D	5FDU200K	5.0	3.4	7.6
20 pF	NP0	± 10 %	E	5FEA200K	5.0	3.4	7.6
40 pF	N750	± 10 %	E	5FEU400K	5.0	3.5	7.8
3 pF	NP0	± 10 %	F	5FFA3R0K	5.0	1.5	2.3
5 pF	NP0	± 10 %	F	5FFA5R0K	5.0	1.6	3.8
10 pF	N750	± 10 %	F	5FFU100K	5.0	2.3	4.2
10 pF	NP0	± 10 %	G	5FGA100K	5.0	2.3	4.2
20 pF	N750	± 10 %	G	5FGU200K	5.0	3.4	7.6
20 pF	NP0	± 10 %	H	5FHA200K	5.0	3.4	7.6
40 pF	N750	± 10 %	H	5FHU400K	5.0	3.5	7.8

Notes

(1) At rated voltage

(2) T.C. = Temperature characteristic per EIA 198

• Data presented is based on a maximum case temperature rise of 30 °C at 25 °C ambient in free air.



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