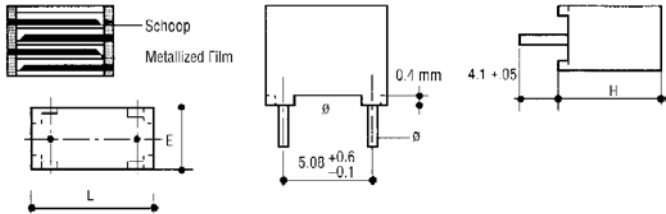




Visit AVX's Website at www.avxcorp.com

BF Series Film Radial Leads



General Characteristics
Climactic Category: 55/100/56 — performance class 2. **Capacitance Range:** C_R 1 nF to 2.2 µF (E12). **Tolerances On C_R:** ±5% and ±10% — other values on request. **Nominal Voltages:** U_R — 63/100/250/400 V, U_R— 40/63/160/200 V. **Category Voltage:** U_C = 0.8 U_R at 100°C. **Test Voltage:** U_t = 1.6 U_R/2 s at 25°C.

Dimensions (mm)

| Case | Max. L | Max. H | Max. E | Ø ±0.02 | Observation |
|------|--------|--------|--------|---------|-----------------------------------|
| 01 | 7.5 | 6.5 | 2.5 | 0.5 | 1.0 nF ≤ C _R ≤ 220 nF |
| 02 | 7.5 | 8.0 | 3.2 | 0.5 | 5.6 nF ≤ C _R ≤ 330 nF |
| 07 | 7.5 | 8.0 | 5.0 | 0.5 | 18.0 nF ≤ C _R ≤ 1.0 µF |
| 05* | 7.5 | 12.0 | 6.0 | 0.5 | 27.0 nF ≤ C _R ≤ 2.2 µF |

*BF05 model upon request.

| Stock No. | Mfr.'s Type | Voltage | Cap. | Tol. | EACH | | |
|-----------|---------------|---------|----------|------|------|-------|---------|
| | | | | | 1-49 | 50-99 | 100-499 |
| 995-0124 | BF014D0103J-- | 63 V | 0.010 µF | 5% | .18 | .13 | .09 |
| 995-0215 | BF014E0103J-- | 100 V | 0.010 µF | 5% | .18 | .13 | .09 |
| 995-0128 | BF014D0153J-- | 63 V | 0.015 µF | 5% | .18 | .13 | .09 |
| 995-0219 | BF014E0153J-- | 100 V | 0.015 µF | 5% | .18 | .13 | .09 |
| 995-0133 | BF014D0223J-- | 63 V | 0.022 µF | 5% | .18 | .13 | .09 |
| 995-0223 | BF014E0223J-- | 100 V | 0.022 µF | 5% | .18 | .13 | .09 |
| 995-0137 | BF014D0333J-- | 63 V | 0.033 µF | 5% | .18 | .13 | .09 |

| Stock No. | Mfr.'s Type | Voltage | Cap. | Tol. | EACH | | |
|-----------|---------------|---------|----------|------|------|-------|---------|
| | | | | | 1-49 | 50-99 | 100-499 |
| 995-0227 | BF014E0333J-- | 100 V | 0.033 µF | 5% | .18 | .13 | .09 |
| 995-0141 | BF014D0473J-- | 63 V | 0.047 µF | 5% | .18 | .13 | .09 |
| 995-0231 | BF014E0473J-- | 100 V | 0.047 µF | 5% | .18 | .13 | .09 |
| 995-0145 | BF014D0683J-- | 63 V | 0.068 µF | 5% | .18 | .13 | .09 |
| 995-0235 | BF014E0683J-- | 100 V | 0.068 µF | 5% | .18 | .13 | .09 |
| 995-0241 | BF014E0124J-- | 100 V | 0.100 µF | 5% | .27 | .19 | .14 |
| 995-0149 | BF014D0104J-- | 63 V | 0.100 µF | 5% | .18 | .13 | .09 |
| 995-0239 | BF014E0104J-- | 100 V | 0.100 µF | 5% | .18 | .13 | .09 |
| 995-0155 | BF014D0154J-- | 63 V | 0.150 µF | 5% | .24 | .16 | .13 |
| 995-0163 | BF014D0224J-- | 63 V | 0.220 µF | 5% | .23 | .15 | .12 |
| 995-0251 | BF074E0224J-- | 100 V | 0.220 µF | 5% | .36 | .26 | .20 |
| 995-0171 | BF024D0334J-- | 63 V | 0.330 µF | 5% | .35 | .25 | .18 |
| 995-0255 | BF074E0334J-- | 100 V | 0.330 µF | 5% | .29 | .24 | .20 |
| 995-0259 | BF074E0394J-- | 100 V | 0.390 µF | 5% | .34 | .29 | .24 |
| 995-0177 | BF074D0474J-- | 63 V | 0.470 µF | 5% | .28 | .23 | .19 |
| 995-0263 | BF074E0474J-- | 100 V | 0.470 µF | 5% | .35 | .29 | .24 |
| 995-0179 | BF074D0564J-- | 63 V | 0.560 µF | 5% | .38 | .32 | .26 |
| 995-0181 | BF074D0684J-- | 63 V | 0.680 µF | 5% | .33 | .27 | .22 |
| 995-0187 | BF054D0155J-- | 63 V | 1.500 µF | 5% | .94 | .81 | .65 |
| 995-0100 | BF014D0102J-- | 63 V | 1000 pF | 5% | .18 | .13 | .09 |
| 995-0191 | BF014E0102J-- | 100 V | 1000 pF | 5% | .18 | .13 | .09 |
| 995-0195 | BF014E0152J-- | 100 V | 1500 pF | 5% | .18 | .13 | .09 |
| 995-0185 | BF074D0105J-- | 63 V | 1.000 µF | 5% | .36 | .31 | .25 |
| 995-0189 | BF054D0225J-- | 63 V | 2.200 µF | 5% | 1.13 | .96 | .77 |
| 995-0108 | BF014D0222J-- | 63 V | 2200 pF | 5% | .18 | .13 | .09 |
| 995-0199 | BF014E0222J-- | 100 V | 2200 pF | 5% | .18 | .13 | .09 |
| 995-0112 | BF014D0332J-- | 63 V | 3300 pF | 5% | .18 | .13 | .09 |
| 995-0203 | BF014E0332J-- | 100 V | 3300 pF | 5% | .18 | .13 | .09 |
| 995-0116 | BF014D0472J-- | 63 V | 4700 pF | 5% | .18 | .13 | .09 |
| 995-0207 | BF014E0472J-- | 100 V | 4700 pF | 5% | .15 | .10 | .08 |
| 995-0118 | BF014D0562J-- | 63 V | 5600 pF | 5% | .21 | .14 | .10 |
| 995-0120 | BF014D0682J-- | 63 V | 6800 pF | 5% | .18 | .13 | .09 |
| 995-0122 | BF014D0822J-- | 63 V | 8200 pF | 5% | .21 | .14 | .10 |
| 995-0134 | BF014E0223K-- | 63 V | 0.022 µF | 10% | .17 | .11 | .09 |
| 995-0150 | BF014D0104K-- | 63 V | 0.100 µF | 10% | .18 | .13 | .09 |
| 995-0178 | BF074D0474K-- | 63 V | 0.470 µF | 10% | .38 | .28 | .21 |
| 995-0101 | BF014D0102K-- | 63 V | 1000 pF | 10% | .17 | .11 | .09 |
| 995-0186 | BF074D0105K-- | 63 V | 1.000 µF | 10% | .39 | .33 | .27 |
| 995-0190 | BF054D0225K-- | 63 V | 2.200 µF | 10% | 1.39 | 1.18 | .96 |
| 995-0109 | BF014D0222K-- | 63 V | 2200 pF | 10% | .17 | .11 | .09 |

Transient Voltage Suppressors

- Small Size
- Low Voltage
- Excellent Clamping Ratio
- High Transient Current Capability
- Response Time: Less than 1 nsec

Typical Applications

- Computer ESD and I/O Protection
- Automotive Transient Protection
- ESD/EMP Protected Connectors
- Data Line Protection
- Telecommunication Transient Protection
- Avionic Transient Protection

0603 Surface Mount

Inductance (L)*: ≤1.0. **Dimensions. Length:** .063" ±.006" (1.60 ±0.15 mm). **Width:** .032" ±.006" (0.80 ±0.15 mm). **Thickness:** .035" max. (0.90 mm). **Termination Finish:** Pb/Pd/Ag.

| Stock No. | Mfr.'s Type | Working Voltage V _{WM} * (V Max.) | Breakdown Voltage V _B * (V) | Clamping Voltage V _C * (V Max.) | Peak Current I _{peak} * (A Max.) | Transient Energy E _{trans} * (Joules Max.) | Cap. C* (pF Typ.) | PER PKG./100 | |
|-----------|--------------|--|--|--|---|---|-------------------|--------------|-------|
| | | | | | | | | 1-9 | 10-24 |
| 213-8098 | VC060314A300 | 14.0 | 16.5-20.3 | 30.0 | 30 | 0.1 | 500 | 94.88 | 66.66 |
| 213-8100 | VC060318A400 | 18.0 | 22.9-28.0 | 40.0 | 30 | 0.1 | 275 | 94.88 | 66.66 |
| 213-8102 | VC060326A580 | 26.0 | 31.0-38.0 | 58.0 | 30 | 0.1 | 200 | 94.88 | 66.66 |
| 213-8104 | VC060330A650 | 30.0 | 37.0-46.0 | 65.0 | 30 | 0.1 | 175 | 94.88 | 66.66 |

0805 Surface Mount

Inductance (L)*: ≤1.5. **Dimensions. Length:** .079" ±.008" (2.01 ±0.2 mm). **Width:** .049" ±.008" (1.25 ±0.2 mm). **Thickness:** .040" max. (1.02 mm). **Land Length:** .028" max. (0.71 mm). **Termination Finish:** Pb/Pd/Ag.

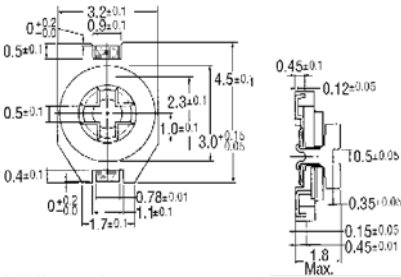
| | | | | | | | | | |
|----------|--------------|-----|---------|------|-----|-----|------|-------|-------|
| 213-5050 | VC080505A150 | 5.6 | 7.6-9.3 | 15.5 | 40 | 0.1 | 1100 | 51.87 | 36.66 |
| 213-5055 | VC080505C150 | 5.6 | 7.1-8.7 | 15.5 | 120 | 0.3 | 2750 | 77.17 | 54.44 |

CTZ3 Series — Multilayer Ceramic Chip Trimmer Capacitors

- Maximum Height: 1.8 mm

| Stock No. | Mfr.'s Type | Min. Cap. Value (pF) | Max. Cap. Value (pF) | TC (ppm/°C) | EACH* |
|-----------|-----------------|----------------------|----------------------|-------------|-------|
| 213-9605 | CTZ3E-05A-W1-PF | 1.5 | 5 | NPO±500 | .92 |
| 213-9620 | CTZ3E-10B-W1-PF | 1.5 | 10 | N400±500 | .92 |
| 213-9630 | CTZ3E-20C-W1-PF | 5.0 | 20 | N750±500 | 1.19 |
| 213-9640 | CTZ3E-40C-W1-PF | 5.0 | 40 | N750±500 | .68 |

*Sold in multiples of 100 only.



AVX RF/Microwave Designer and Tuning Kits

Tuning Kit Type 100. Consists of 300 capacitors, 10 each of 30 values from 0.5 pF to 56 pF with tolerances of ±0.1 pF and ±2%.

881-7525 EACH 253.00

Designer Kit Type 800. Consists of 300 capacitors, 10 each of 30 values from 0.1 to 47.0 pF with tolerances from ±0.05 pF to ±5%. Voltages of 25, 50 and 100 volts.

881-7505. Accu-P 0805KIT02 EACH 240.35

0805 Surface Mount (continued)

| Stock No. | Mfr.'s Type | Working Voltage V _{WM} * (V Max.) | Breakdown Voltage V _B * (V) | Clamping Voltage V _C * (V Max.) | Peak Current I _{peak} * (A Max.) | Transient Energy E _{trans} * (Joules Max.) | Cap. C* (pF Typ.) | PER PKG./100 | |
|-----------|--------------|--|--|--|---|---|-------------------|--------------|-------|
| | | | | | | | | 1-9 | 10-24 |
| 213-5065 | VC080514C300 | 14.0 | 15.9-19.4 | 30.0 | 120 | 0.3 | 1200 | 77.17 | 54.44 |
| 213-6070 | VC080518A400 | 18.0 | 22.9-28.0 | 40.0 | 30 | 0.1 | 350 | 77.17 | 54.44 |
| 213-6075 | VC080518C400 | 18.0 | 22.5-27.5 | 40.0 | 100 | 0.3 | 650 | 77.17 | 59.10 |
| 213-6085 | VC080526C580 | 26.0 | 30.5-37.3 | 58.0 | 100 | 0.3 | 200 | 77.17 | 54.44 |

1206 Surface Mount

Inductance (L)*: ≤1.7. **Dimensions. Length:** .126" ±.008" (3.20 ±0.2 mm). **Width:** .063" ±.008" (1.60 ±0.2 mm). **Thickness:** .040" max. (1.02 mm). **Land Length:** .028" max. (0.71 mm). **Termination Finish:** Pb/Pd/Ag.

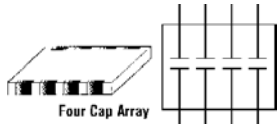
| | | | | | | | | | |
|----------|--------------|------|-----------|------|-----|-----|------|-------|-------|
| 213-6090 | VC120603A100 | 3.6 | 4.0-5.5 | 10.0 | 40 | 0.1 | 2000 | 64.52 | 45.55 |
| 213-5070 | VC120605D150 | 5.6 | 7.1-8.7 | 15.5 | 150 | 0.4 | 3000 | 86.02 | 61.10 |
| 213-5075 | VC120614A300 | 14.0 | 16.5-20.3 | 30.0 | 40 | 0.1 | 600 | 64.52 | 45.55 |
| 213-5080 | VC120614D300 | 14.0 | 15.9-19.4 | 30.0 | 150 | 0.4 | 1400 | 86.01 | 61.11 |
| 213-5090 | VC120618D400 | 18.0 | 22.5-27.5 | 40.0 | 150 | 0.4 | 1000 | 86.02 | 61.11 |
| 213-5045 | VC120630D650 | 30.0 | 36.0-45.0 | 65.0 | 120 | 0.4 | 500 | 86.02 | 61.11 |

V_{WM} — Maximum steady-state DC operating voltage the varistor can maintain and not exceed 50 µA leakage current. V_B — Voltage across the device measured at 1 mA DC current. V_C — Maximum peak voltage across the varistor measured at a specified pulse current and waveform(transient energy rating of 0.1 J=2 A, 8/20 µs pulse current and waveform; transient energy rating of 0.2 J=5 A, 8/20 µs pulse current and waveform; transient energy rating of ≥0.4 J=10 A, 8/20 µs pulse current and waveform); I_{peak} — Maximum peak current which may be applied with the specified waveform without device failure; E_{trans} — Maximum energy which may be dissipated with the specified waveform without device failure; C — Device capacitance measured with zero volt bias 0.5 Vrms and 1 kHz. L — Device inductance measured with a current edge rate of 100 mA/nS.

AVX Cap Arrays

Four Cap Array 0612 Case Size

The 0612 four capacitor array takes up less than half the board space of four discrete 0603 components and is much easier to handle. The 0612 cap array is ideal for all applications which use multiple capacitors.



| Stock No. | Mfr.'s Type | Volt. (V) | Value (mF) | Temp. Coef. | Tol. (%) | EACH* |
|-----------|----------------|-----------|------------|-------------|----------|-------|
| 213-9500 | W3A41A100KAT1A | 100 | 100 | NPO | 10 | .25 |
| 213-9510 | W3A41A101KAT1A | 100 | 101 | NPO | 10 | .33 |
| 213-9518 | W3A41A221KAT1A | 100 | 221 | NPO | 10 | .33 |
| 213-9526 | W3A41C102MAT1A | 100 | 102 | X7R | 20 | .25 |
| 213-9538 | W3A41C103MAT1A | 100 | 103 | X7R | 20 | .33 |
| 213-9542 | W3A45C333MAT1A | 50 | 333 | X7R | 20 | .33 |
| 213-9544 | W3A43C473MAT1A | 25 | 473 | X7R | 20 | .41 |
| 213-9549 | W3A4YC104MAT1A | 16 | 104 | X7R | 20 | .36 |

*Sold in multiples of 100 only.