

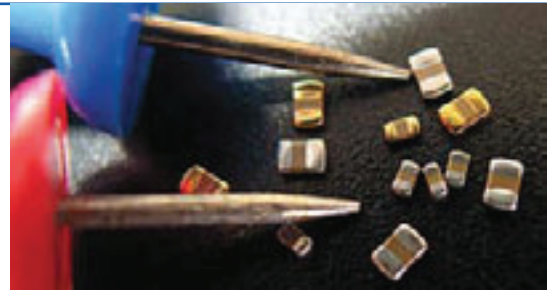
C04/C06/C08 Broadband Blocks

Functional Applications

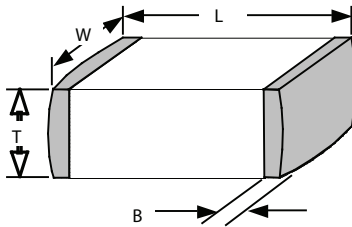
Fiber Optic Links, High Isolation Decoupling, LAN's, VCO Frequency Stabilization, Duplexers, RF/Microwave Modules, Instruments and Test Equipment.

Benefits

Resonance free DC Blocking / Decoupling, Less than 0.25 db loss @ 4 GHz (typical), Surface mountable



Mechanical Specification



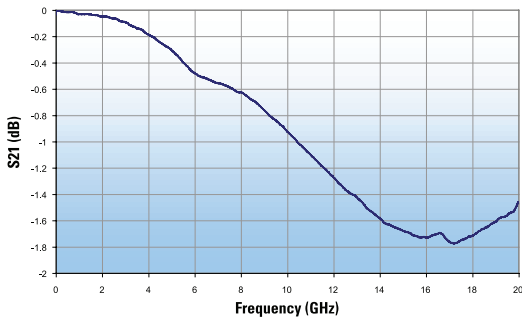
| Product Code | Body Dimensions | | | Band Dimensions (B) | |
|--------------|-----------------|-----------------|---------------|---------------------|---------|
| | Length (L) | Width (W) | Thickness (T) | Min | Max |
| C04BL | 0.040" ± 0.008" | 0.020" ± 0.006" | 0.028" Max | 0.003" | 0.019" |
| C06BL | 0.060" ± 0.012" | 0.031" ± 0.009" | 0.036" Max | 0.006" | 0.03" |
| C08BL | 0.081" ± 0.020" | 0.051" ± 0.013" | 0.061" Max | 0.012" | 0.0468" |

Part Characteristics

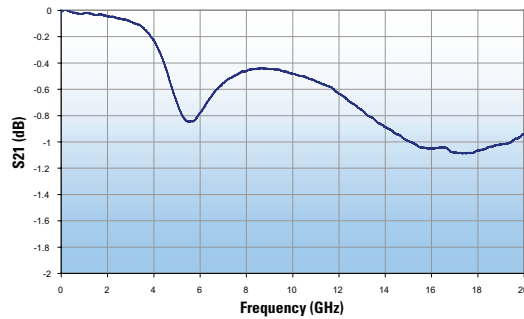
| Part Number | Capacitance Guaranteed Minimum Value | Voltage Rating | Temperature Coefficient -55°C to 125°C | Maximum Dissipation Factor | Insulation Resistance (MΩ Minimum) | Aging Rate | Frequency Range | Termination |
|-------------------|--------------------------------------|----------------|----------------------------------------|----------------------------|------------------------------------|-----------------------|-----------------|----------------|
| C04BL121X-5UN-X0T | 120pF @ 1KHz, 2Vrms | 50 Vdc | ± 15% | 3.0% @ 1KHz, 2Vrms | 10 ⁴ | <=1.5% / decade hours | 10MHz – 40GHz | "U" & "S" |
| C06BL851X-1UN-X0T | 850pF @ 1KHz, 2Vrms | 100 Vdc | | | | | 2MHz – 30GHz | "U", "S" & "Z" |
| C08BL242X-5UN-X0T | 2400pF @ 1KHz, 2Vrms | 50 Vdc | | | | | 1MHz – 20GHz | "U", "S" & "Z" |
| C08BL102X-1UN-X0T | 1000pF @ 1KHz, 2Vrms | 100 Vdc | | | | | 1MHz – 20GHz | "U", "S" & "Z" |

Performance

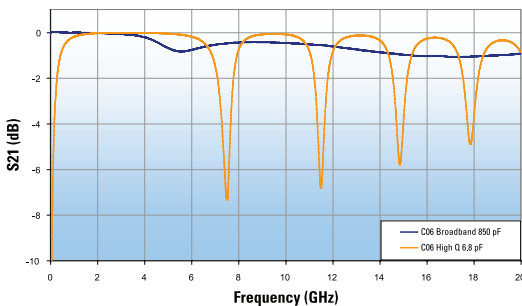
C08BL242X-5UN-X0T Insertion Loss (S21)



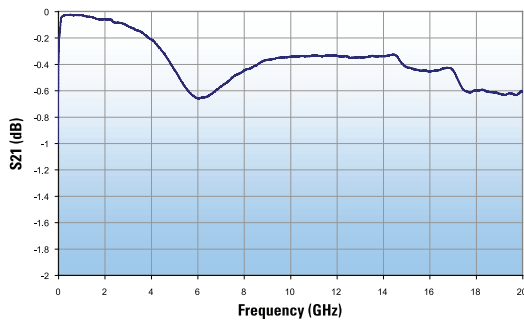
C06BL851X-1UN-X0T Insertion Loss (S21)



High Q & Broadband MLC Compared Insertion Loss (S21)



C04BL121X-5UN-X0T Insertion Loss (S21)



The information above represents typical device performance.