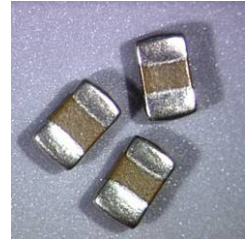




# C04 / C06 / C08

## Broadband DC Blocks

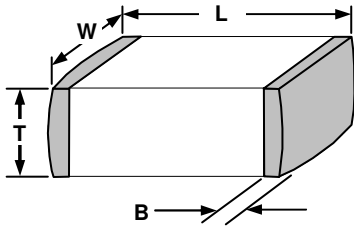
Low loss resonance free performance



### FUNCTIONAL APPLICATIONS:

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

### Mechanical Specification



### BENEFITS:

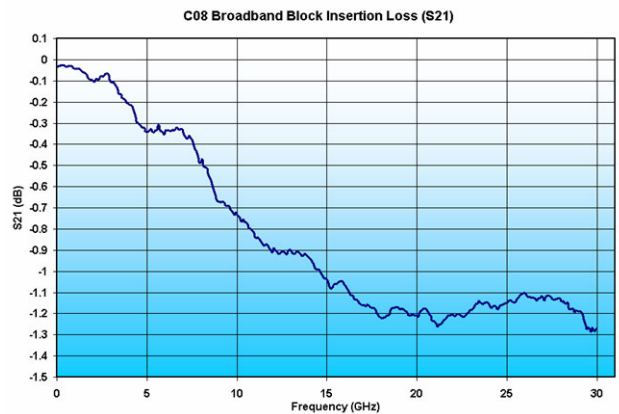
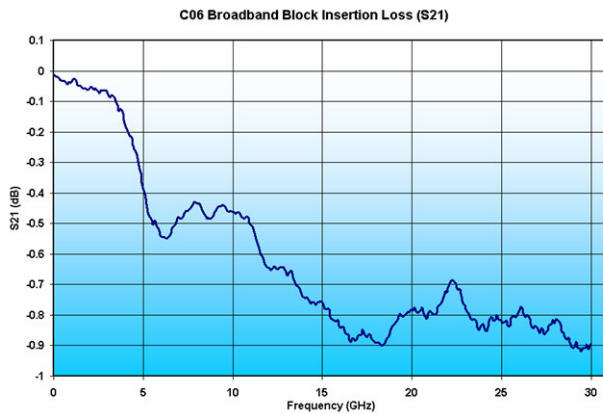
Resonance free DC Blocking / Decoupling.  
Less than 0.25 db loss @ 4 GHz (typical).  
Surface mountable.

| Product Code | Body Dimensions                        |                                        |                      | Band Dimensions                                   |
|--------------|----------------------------------------|----------------------------------------|----------------------|---------------------------------------------------|
|              | Length (L)                             | Width (W)                              | Thickness (T)        | Band (B)                                          |
| C04 BL       | .040" $\pm$ .004"<br>(1.02 $\pm$ 0.1)  | .020" $\pm$ .004"<br>(.51 $\pm$ 0.1)   | .024"<br>(0.61) Max. | .008" $\pm$ .004"<br>(.02 $\pm$ .01)              |
| C06 BL       | .060" $\pm$ .006"<br>(1.52 $\pm$ .152) | .030" $\pm$ .006"<br>(.762 $\pm$ .152) | .030"<br>(.762) Max. | .010" + .010" / - .005"<br>(.254 + .254 / - .127) |
| C08 BL       | .080" $\pm$ .008"<br>(2.03 $\pm$ .203) | .050" $\pm$ .008"<br>(1.27 $\pm$ .203) | .030"<br>(.762) Max. | .035" $\pm$ .004"<br>(.889 $\pm$ .102)            |

### Part Characteristics

| Part Number                                   | Capacitance<br>Guaranteed<br>Minimum Value | Voltage<br>Rating | Temperature<br>Coefficient<br>-55°C to 125°C | Maximum<br>Dissipation<br>Factor | Insulation<br>Resistance<br>(M $\Omega$ Minimum) | Aging<br>Rate                  | Frequency<br>Range | Metallization                                         |
|-----------------------------------------------|--------------------------------------------|-------------------|----------------------------------------------|----------------------------------|--------------------------------------------------|--------------------------------|--------------------|-------------------------------------------------------|
| C04BLBB2X5_<br>UX / ZX / SX<br>0402 case size | 120pF @ 1KHz,<br>.2Vrms                    | 50 V dc           | $\pm$ 15%                                    | 3.0% @<br>1KHz,<br>.2Vrms        | 10 <sup>4</sup>                                  | $\leq$ 1.5%<br>decade<br>hours | 5MHz – 30GHz       | "U"=Ni barrier<br>w / solder<br>plate                 |
| C06BLBB2X5_<br>UX / ZX / SX<br>0603 case size | 850pF @ 1KHz,<br>.2Vrms                    |                   |                                              |                                  |                                                  |                                | 2MHz – 30GHz       | "S"=Ni barrier<br>w / gold flash<br>RoHS<br>compliant |
| C08BLBB1X5_<br>UX / ZX / SX<br>0805 case size | 2400pF @ 1KHz,<br>.2Vrms                   |                   |                                              |                                  |                                                  |                                | 1MHz – 20GHz       | "Z"= Ni/Sn<br>RoHS<br>compliant                       |

### Performance



### Dielectric Laboratories Inc.

2777 Route 20 East, Cazenovia, NY 13035-9433  
Phone: 315-655-8710 Facsimile: 315-655-0445

e-mail: [sales@dilabs.com](mailto:sales@dilabs.com) web: <http://www.dilabs.com>

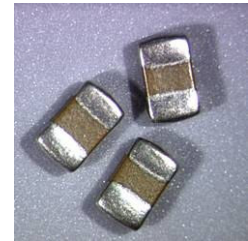
QUALITY SYSTEM ISO 9001:1994 CERTIFIED ENVIRONMENTAL SYSTEM ISO 14001:1996 CERTIFIED



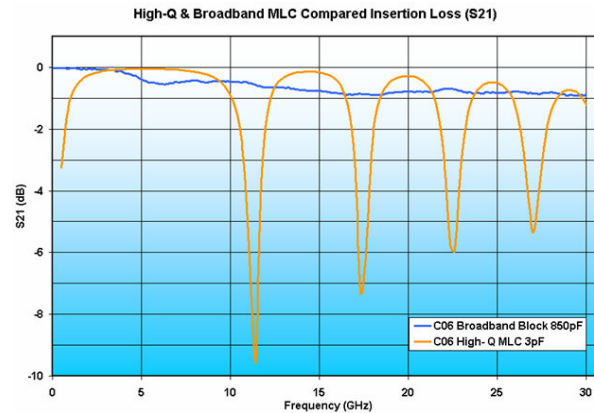
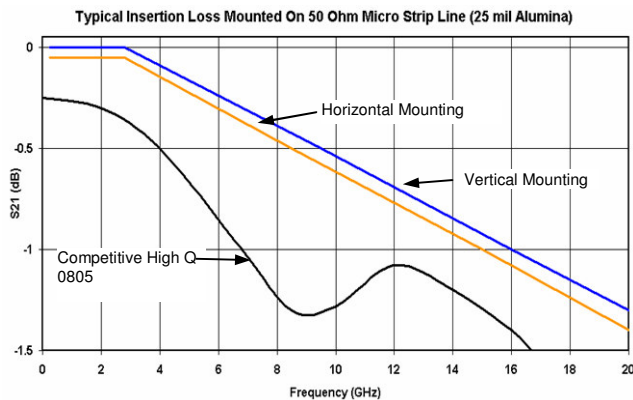
# C04 / C06 / C08

## Broadband DC Blocks

Low loss resonance free performance



### Performance



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| <a href="#"><u>C08BL242X-5UN-X0B</u></a> | <a href="#"><u>C08BL242X-5SN-X0T</u></a> | <a href="#"><u>C06BL851X-5UN-X0T</u></a> | <a href="#"><u>C08BL242X-5ZN-X0T</u></a> | <a href="#"><u>C06BL851X-5ZN-X0T</u></a> |
| <a href="#"><u>C04BL121X-5ZN-X0T</u></a> | <a href="#"><u>C04BL121X-5SN-X0T</u></a> | <a href="#"><u>C06BL851X-1SN-X0T</u></a> | <a href="#"><u>C08BL242X-1UN-X0T</u></a> | <a href="#"><u>C08BL242X-1ZN-X0T</u></a> |
| <a href="#"><u>C08BL242X-1SN-X0T</u></a> | <a href="#"><u>C06BL851X-1ZN-X0T</u></a> | <a href="#"><u>C06BL851X-1UN-X0T</u></a> | <a href="#"><u>C08BL102X1-SN-X0T</u></a> | <a href="#"><u>C08BL102X5-ZN-X0T</u></a> |
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