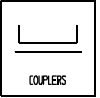


# CBZ-B Series WIDEBAND DIRECTIONAL COUPLERS

10 to 1000 MHz / 3-Port CaseFree / Miniature MMIC-Compatible Design / Minimal Size & Weight



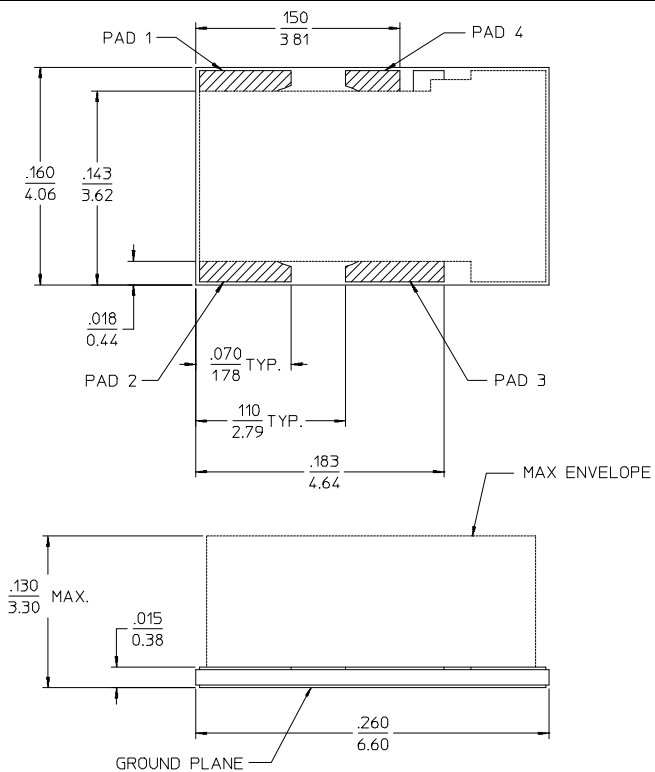
## PRINCIPAL SPECIFICATIONS

Model Number	Coupling, dB, Nom.	RF Bandwidth
CBZ-11B-500	11	10 to 1000 MHz
CBZ-20B-500	20	10 to 1000 MHz

Coupling Value is referred to Input Port

## GENERAL SPECIFICATIONS

Frequency Sensitivity:  $\pm 1$  dB  
 Impedance: 50  $\Omega$  nom.  
 Insertion Loss (above Coupling Value):  
     10 to 500 MHz: 1 dB max.  
     500 to 1000 MHz: 1.5 dB max.  
 Directivity: 10 to 300 MHz: 20 dB min.  
               300 to 800 MHz: 15 dB min.  
               800 to 1000 MHz: 13 dB min.  
 VSWR: 10 to 500 MHz: 1.5:1 max.  
        500 to 1000 MHz: 1.8:1 max.  
 CW Input: 1 W max.  
 Weight, Nominal: 0.007 oz. (200 mg)  
 Operating Temperature:  $-55^{\circ}$  to  $+85^{\circ}$



**NOTES:**

1. Tolerance on 3 place decimals  $\pm 0.10(.25)$  except as noted.
2. Max. is largest dimension allowed.
3. Dimensions in inches over millimeters.

Pad	Function
1	Main Output
2	Main Input
3	Forward Coupled Out
4	Connection <i>disallowed!</i>

**General Notes:**

1. The CBZ-B *CaseFree* series are compatible with MMIC and other similar sub-miniature components in size and process. Their low 0.130" profile allows integration within hermetic packages using silver epoxy, solder or wire bonding attachment techniques.
2. Similarly constructed Couplers are available in the CRZ-B series, with both coupled ports unterminated for use as a 4 port Bi-Directional Coupler.
3. Applications of directional couplers include the monitoring of incident and reflected power, in signal sampling for control loops, as well as test signal injection devices in BITE systems.

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