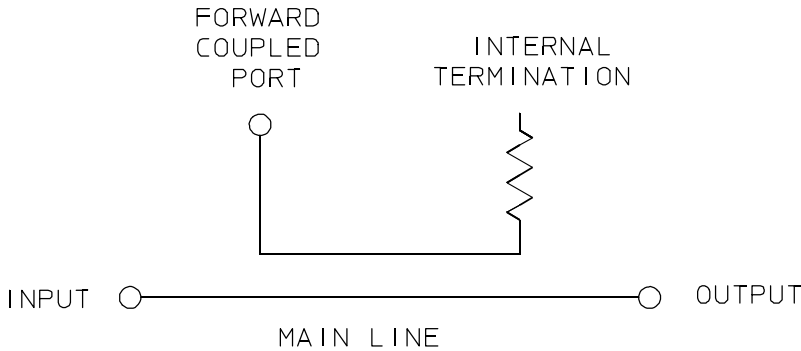


CBF-A Series

3-PORT DIRECTIONAL COUPLERS

5 to 2000 MHz / Multi-Octave / 10 & 20 dB Models / Hi-Reliability Hermetic Package / Flatpack



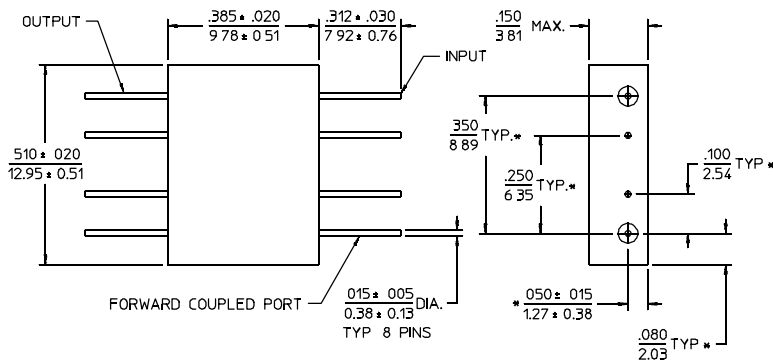
PRINCIPAL SPECIFICATIONS

Model Number	Frequency Range, MHz	Performance Bandwidth, MHz	α Coupling dB, Nom.	Frequency Sensitivity, dB, Max.	Directivity, dB, Min.	*Insertion Loss, dB, Max.	VSWR, Max.
CBF-10A-375	5 - 750	5 - 750	10 ± 1.0	± 0.5	20	1.3	1.5:1
CBF-20A-375	5 - 750	5 - 750 10 - 400	20 ± 1.0 20 ± 1.0	± 0.75 ± 0.5	18 20	1.0 0.6	1.5:1 1.3:1
CBF-11A-1250	100 - 2000	100 - 2000 500 - 1000	11 ± 1.0 11 ± 1.0	± 0.5 ± 0.5	18 20	1.5 1.2	1.7:1 1.5:1
CBF-20A-1250	100 - 2000	100 - 2000 500 - 1000	20 ± 1.0 20 ± 1.0	± 0.5 ± 0.5	18 20	1.5 1.2	1.7:1 1.5:1

α Coupling is Referenced to the Input

* Insertion Loss excludes Coupling Loss

A-Size Package Outline



- NOTES:
1. Tolerance on 3 place decimals ±.010(.25) except as noted.
 2. Dimensions in inches over millimeters.
 3. Dimensions marked with * apply only at body.
 4. All unmarked pins are case ground.

GENERAL SPECIFICATIONS

Impedance: 50 Ω nom.
 CW Input: 1 W max.
 Weight, nominal: 0.1 oz (2.8 g)
 Operating Temperature: -55° to +85°C

OPTIONS

Coupling Values: 5 to 30 dB
 Higher Frequency: up to 2.5 GHz
 Close Tolerance Coupling: ± 0.5 dB

General Notes:

1. Directional couplers are useful for monitoring incident and reflected power, signal sampling, control loops and BITE.
2. The CBF-A series consists of 3 port devices with one port internally terminated. They may be used back-to-back as dual directional couplers. The CRF-A series of bi-directional couplers provides direct access to both coupled ports.
3. Merrimac couplers may be ordered with specific coupling values up to 30 dB and over selected frequency bands up to 18 GHz in microwave packages.
4. These units comply with the applicable portions of MIL-C-15370 and can be supplied screened to comply with additional specifications you designate for military and aerospace applications requiring higher reliability.

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