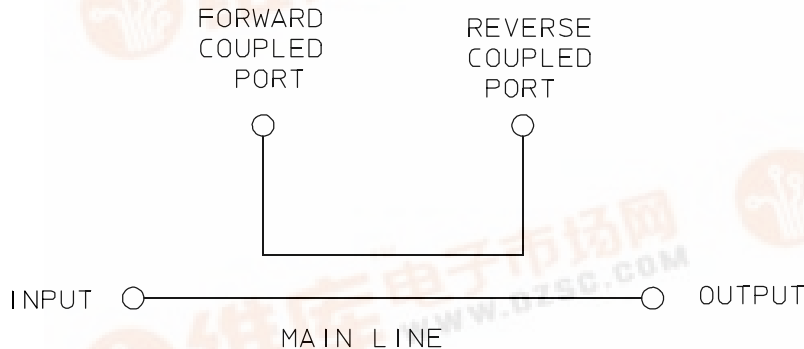


CRF-A Series

BI-DIRECTIONAL COUPLERS

5 to 1500 MHz / 4-Port / Multi-Octave / Minimal Size and Weight / Hi-Rel Hermetic Flatpack



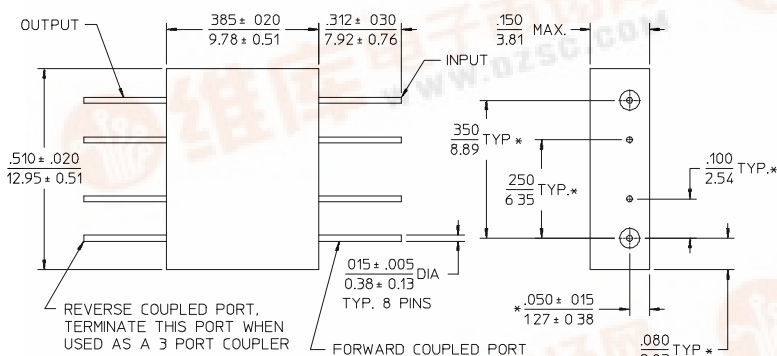
PRINCIPAL SPECIFICATIONS

Model Number	Frequency Range, MHz	Performance Bandwidth, MHz	□ Coupling Value, dB, Nom.	Frequency Sensitivity, dB, Max.	Directivity, dB, Min.	*Insertion Loss, dB, Max.	VSWR, Max.
CRF-10A-250	5 - 500	5 - 500	10 ±1.0	± 0.5	20	1.3	1.5:1
CRF- 20A-250	5 - 500	5 - 500	20 ±1.0	± 0.75	18	1.0	1.5:1
		10 - 400	20 ±1.0	± 0.5	20	0.6	1.3:1
CRF-11A-1000	100 - 1500	100 - 1500	11 ±1.0	± 0.5	18	1.5	1.7:1
		500 - 1000	11 ±1.0	± 0.5	20	1.2	1.5:1
CRF-20A-1000	100 - 1500	100 - 1500	20 ±1.0	± 0.5	18	1.5	1.7:1
		500 - 1000	20 ±1.0	± 0.5	20	1.2	1.5:1

□ Coupling is Referenced to the Input

* Insertion Loss excludes Coupling Loss

Outline of A-Size Package



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

OPTIONAL SPECIFICATIONS

Coupling Values:	5 to 30 dB
Frequency Bands:	up to 2.5 GHz
Close tolerance Coupling:	± 0.5 dB
Three Port Equivalents:	see CBF series

General Notes:

- Merrimac directional couplers are available in a variety of packages to suit most applications. The CRF-A series utilizes the standard flatpack which is suitable for aerospace applications where size, weight and reliability are important considerations.
- Applications of directional couplers include monitoring of incident and reflected power, signal sampling for control loops and test signal injection devices in BITE. These Bi-Directional Couplers have both coupled ports available but they may be ordered with one coupled port terminated internally as in the CBF series of directional couplers.
- Merrimac Couplers may be ordered with coupling values up to 30 dB covering selected frequency bands up to 65 GHz.
- These units comply with MIL-C-15370 and can be supplied screened for compliance with additional specifications you specify for military and aerospace applications requiring higher reliability.