

CR & CRM Series

DIRECTIONAL COUPLERS

100 kHz to 1000 MHz / Multi-Octave / 10, 15, & 20 dB Coupling / High Directivity / SMA & BNC



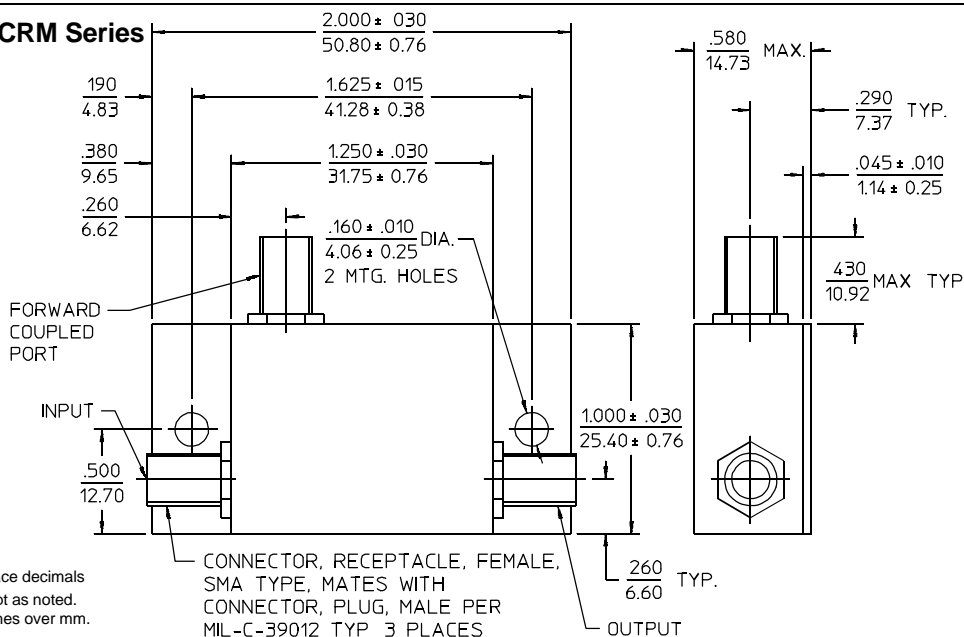
PRINCIPAL SPECIFICATIONS

Model Number, SMA	Model Number, BNC	Frequency Range, MHz	Operating Bandwidth, MHz	Coupling Tolerance, \pm dB, Max.	Frequency Sensitivity, dB, Max.	Directivity, dB, Min.	Insertion Loss, dB, Max.*	VSWR, Main Arm	VSWR, Cpld. Arm
CRM-10-50	CR-10-50	2 - 100	2 - 100	10 \pm 1.0	\pm 0.5	30	0.5	1.3:1	1.3:1
CRM-10-500	CR-10-500	10 - 1000	10 - 50	10 \pm 1.0	\pm 0.5	20	1.0	1.5:1	1.5:1
			50 - 500	10 \pm 1.0	\pm 0.5	25	1.0	1.3:1	1.3:1
			500 - 1000	10 \pm 1.0	\pm 0.5	20	1.5	1.5:1	1.5:1
CRM-15-50	CR-15-50	2 - 100	2 - 100	15 \pm 1.0	\pm 0.5	30	0.5	1.3:1	1.3:1
CRM-15-500	CR-15-500	5 - 1000	5 - 100	15 \pm 1.0	\pm 0.5	20	0.5	1.3:1	1.3:1
			100 - 500	15 \pm 1.0	\pm 0.75	25	1.0	1.2:1	1.3:1
			500 - 1000	15 \pm 1.0	\pm 0.75	20	1.5	1.3:1	1.5:1
CRM-20-2.5	CR-20-2.5	0.1 - 5	0.1 - 5	20 \pm 1.0	\pm 0.5	30	0.5	1.3:1	1.3:1
CRM-20-50	CR-20-50	2 - 100	2 - 100	20 \pm 1.0	\pm 0.5	30	0.5	1.3:1	1.3:1
CRM-20-500	CR-20-500	10 - 1000	10 - 500	20 \pm 1.0	\pm 0.5	20	1.0	1.3:1	1.3:1
			500 - 1000	20 \pm 1.0	\pm 1.0	15	1.5	1.35:1	1.35:1

\pm Coupling is Referenced to the Input

* Insertion Loss excludes Coupling loss

Package Outline - CRM Series



NOTES: 1. Tolerance on 3 place decimals \pm 0.020(.51) except as noted.
2. Dimensions in inches over mm.

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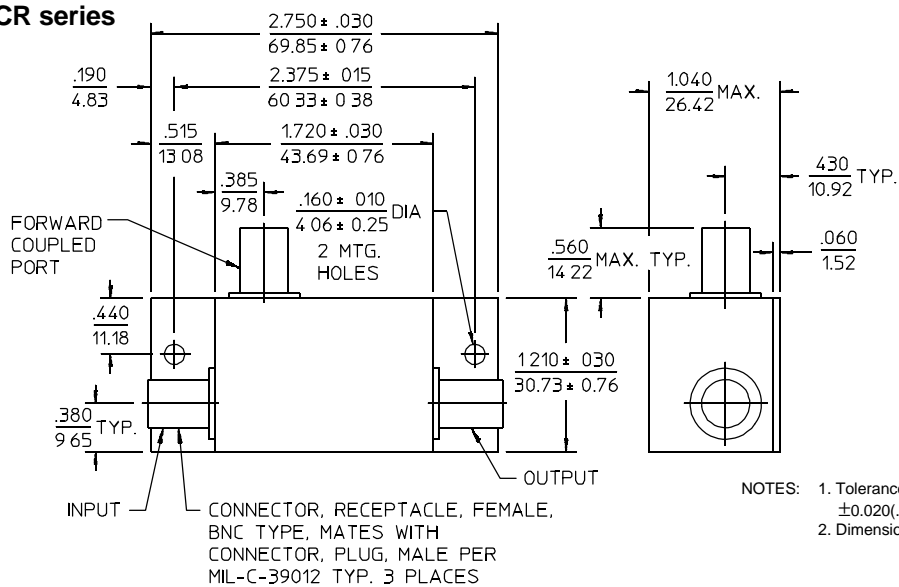
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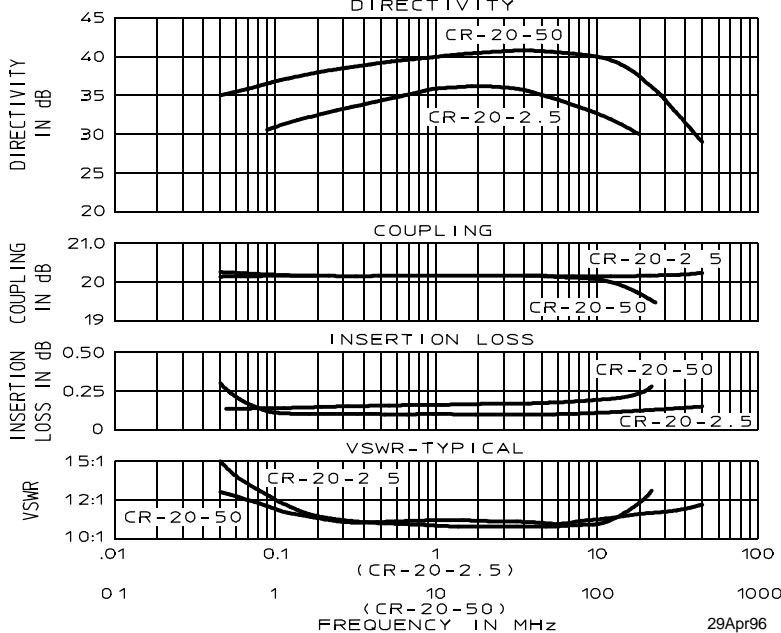
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Package Outline CR series



Typical Performance



GENERAL SPECIFICATIONS

Impedance:	50 Ω nom.
CW Input:	5 Watts max.
Weight: CR Series:	2 oz (56 g) nom.
CRM Series:	1.5 oz (42 g) nom.
Operating Temperature:	-55° to +85°C

General Notes:

- Merrimac directional couplers are available in a variety of packages to suit most applications such as monitoring of incident and reflected power, signal sampling, control loops and test signal injection devices in BITE.
- The CR/CRM series couplers may be custom ordered with coupling values up to 30 dB and over selected frequency bands up to 1.5 GHz.
- All Merrimac couplers comply with MIL-C-15370 and can be supplied screened for compliance with additional specifications you designate for military and aerospace applications requiring higher reliability.