CDM-M-G SERIES - DUAL DIRECTIONAL COUPLERS

TECHNICAL FEATURE

FEATURES

- 500 MHz to 18 GHz
- Stripline Octave Bandwidths
- 10, 20, 30 dB Coupling
- 50 W
- Low Cost
- SMA

PRINCIPAL SPECIFICATIONS								
Model Number	Frequency Range, GHz	Nominal Coupling,¤ dB	Frequency Sensitivity, dB, Max.	Directivity dB, Min.	*Insertion Loss, dB, Max.	VSW Main Line	/R, Max. Coupled Lines	Outline Ref.
CDM-20M-3G		$20\pm\!\!1.25$			0.50			5
CDM-20M-6G		20 ±1.25			0.50			7
CDM-10M-10G CDM-20M-10G CDM-30M-10G	7.0 - 12.4	$\begin{array}{c} 10 \pm \! 1.25 \\ 20 \pm \! 1.25 \\ 30 \pm \! 1.25 \end{array}$	± 0.6	16	1.90 0.70 0.60	1.35:1	1.30:1	7 7 8
CDM-20M-12G		20 ±1.25			1.00			9
^a Coupling is referenced to the input and includes frequency sensitivity * Insertion Loss including Coupling Loss						21Feb96		

POWER SPECIFICATIONS

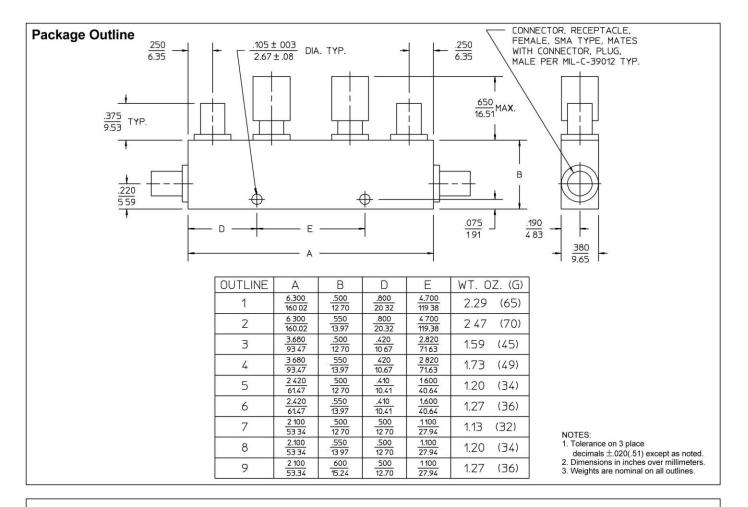
Coupled Power "	Loss":	
n service and a product of the service of the servi	10 dB section:	0.46 dB
	20 dB section:	0.044 dB
	30 dB section:	0.004 dB
Peak Power:	CDM-M-12G:	2 kW max.
	CDM-M-15G:	1 kW max.
	All Others:	3 kW max.
Input Power (For	ward):	50 Watts max.

GENERAL SPECIFICATIONS

Impedance:	50 Ω nom.
Operating Temperature:	– 55° to +85°C
SMA Connectors:	Female, to meet the
	interface rqts.
	of MIL-C-39012.
N type connectors:	see CDN-M series
Other frequency bands:	Available option
	· · · · · · · · · · · · · · · · · · ·



CDM-M-G SERIES - DUAL DIRECTIONAL COUPLERS



PACKAGE OUTLINE

General Notes:

1. Units in the CDM series of dual directional couplers comprise two directional couplers back-to-back designed to monitor both forward and reflected power with minimal perturbation to the main line signal.

2. Each miniature coupler is a multi section quarter wave coupler utilizing stripline technology designed to cover an octave band of frequencies.

3. Dual directional couplers with unequal coupling values or dual in-line configuration may be custom ordered with coupling values up to 30 dB and with coverage extending over selected frequency bands up to 18 GHz.

4. Merrimac directional couplers comply with MIL-C-15370 and may be supplied screened for compliance with additional specifications you designate for military and aerospace applications requiring higher reliability

21Feb96

