

Surface Mount Directional Coupler

75Ω, 20 to 1000 MHz



RCM-12-4-75

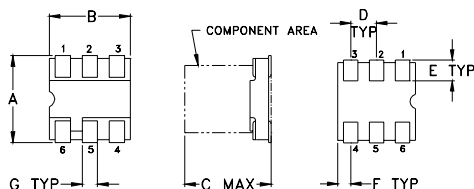
Maximum Ratings

Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C

Pin Configuration

INPUT	3
OUTPUT	4
COUPLED	1
GND	2
75Ω TERM (EXTERNAL)	6
NOT USED	5

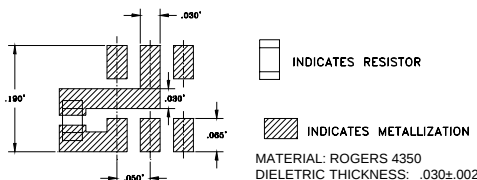
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	wt.
.160	.150	.160	.050	.040	.025	.028	grams
4.06	3.81	4.06	1.27	1.02	0.64	.71	.15

PCB Layout-1



Features

- wideband frequency, 20-1000 MHz
- low insertion loss, 0.7 dB typ.
- good VSWR, 1.2:1 typ.

Applications

- CATV



CASE STYLE: DB714
PRICE: \$ 3.95 ea.
QTY.: (10-49)

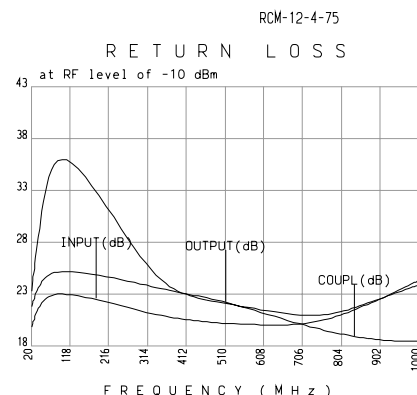
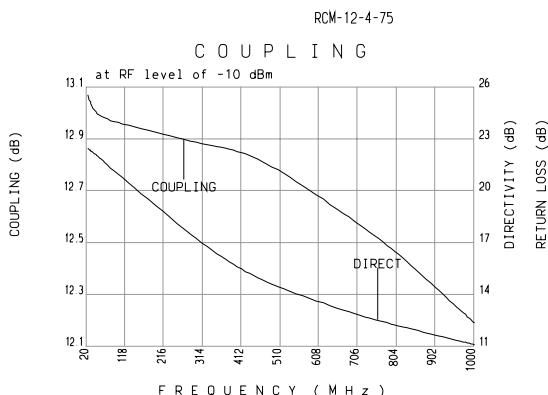
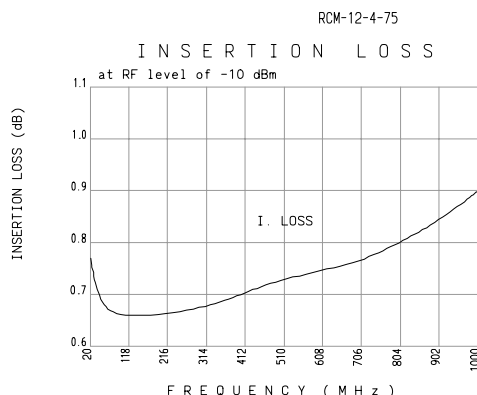
Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)	MAINLINE LOSS (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
		L		M		U		L		M		U			L	MU
f_L-f_U	Max. Nom. Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Max.
20-1000	12.8±0.5 ±0.9	0.7	1.2	0.7	1.3	0.8	1.5	20	15	15	—	11	—	1.20	1	1

L= 20-200 MHz M=200-500 MHz U= 500-1000 MHz

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
20.00	0.77	13.07	22.46	19.83	23.29	21.80
40.00	0.69	12.99	22.11	22.18	29.38	24.15
80.00	0.65	12.97	21.30	23.63	40.21	25.77
300.00	0.67	12.88	17.05	21.28	25.41	23.99
400.00	0.70	12.86	15.53	20.56	22.81	23.09
500.00	0.73	12.79	14.40	20.19	22.25	22.47
700.00	0.76	12.58	12.82	19.87	20.74	20.07
800.00	0.80	12.47	12.23	20.90	21.16	19.16
900.00	0.84	12.33	11.65	22.51	22.56	18.51
1000.00	0.90	12.19	11.09	24.36	23.93	18.45



Mini-Circuits®
Distribution Centers NORTH AMERICA

INTERNET <http://www.minicircuits.com>
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661
800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-835094 • Fax 44-1252-837010

ISO 9001 CERTIFIED

REV. A
M70744
ED-7875/1
RCM-12-4-75
IG/TD/CP
000302