

Surface Mount Directional Coupler

50Ω, 100 to 1200 MHz



ADC-20-12

Maximum Ratings

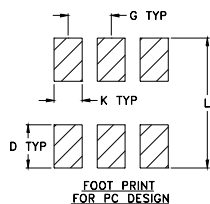
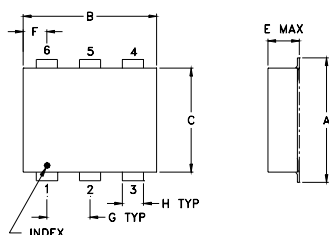
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C

Pin Configuration

INPUT	1
OUTPUT	6
COUPLED	3
GND	2
50Ω TERM (EXTERNAL)	4
ISOLATE (DO NOT USE)	5

EVALUATION BOARD P/N: TB-05

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.280	.310	.220	.100	.155	.055	.100	.030
7.11	7.87	5.58	2.54	3.94	1.40	2.54	0.76

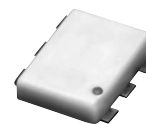
J	K	L	wt.
—	.065	.300	grams
—	1.65	7.62	.45

Features

- useable to 1500 MHz
- low insertion loss, 0.5 dB typ.
- high directivity, 26 dB typ.
- good VSWR, 1.17:1 all ports

Applications

- CATV



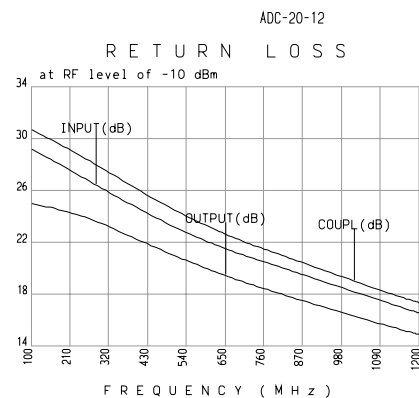
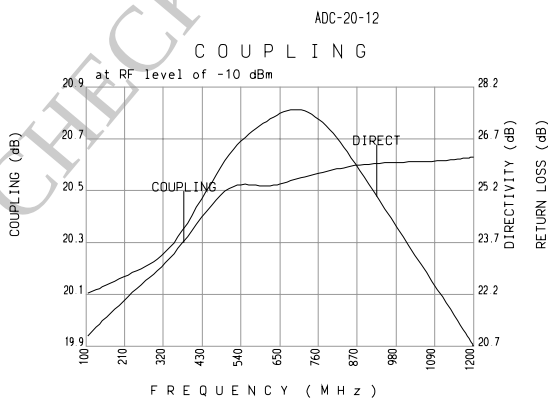
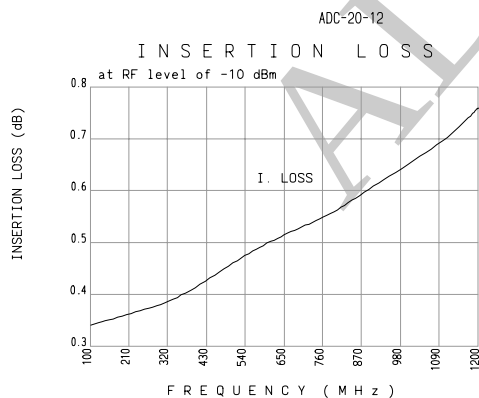
CASE STYLE: CD542
PRICE: \$6.95 ea.
QTY.: (10-49)

Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)	MAINLINE LOSS (dB)						DIRECTIVITY (dB)				VSWR (:1)	POWER INPUT, W			
		L		M		U		L		M			U			
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.		Typ.	Min.	Typ.	Max.
f _L -f _U	Max. Nom. Flatness															
100 - 1200	20±0.75 ±0.7	—	—	0.5	1.1	—	—	—	—	26	13	—	—	1.17	1	1

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
100.00	0.34	19.94	22.23	29.24	25.01	30.72
250.00	0.37	20.14	22.91	26.99	24.13	28.60
350.00	0.39	20.24	23.45	25.38	22.81	26.88
500.00	0.46	20.56	26.44	23.21	21.05	24.55
600.00	0.50	20.50	27.16	22.03	19.94	23.24
700.00	0.53	20.55	27.78	21.02	18.96	22.06
800.00	0.56	20.58	27.00	20.17	18.09	21.12
900.00	0.61	20.61	25.40	19.23	17.25	20.16
1100.00	0.69	20.61	22.34	17.44	15.64	18.19
1200.00	0.76	20.63	20.72	16.56	14.90	17.35



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