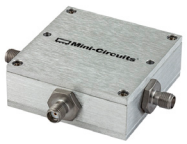
DC Pass

Directional Coupler

ZADC-10-17-S+

50Ω Up to 5W 1000 to 1700 MHz



CASE STYLE: CC51-1

Connectors	Model
SMA	ZADC-10-17-S+

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
DC Current	1.0A

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

INPUT	1
OUTPUT	3
COUPLED	2

Features

- excellent directivity, 25 dB typ.
- excellent VSWR, 1.20 typ.
- power input up to 5W
- low cost
- DC current through input to output 1.0A Max.

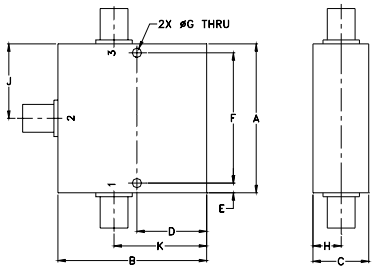
Applications

- GSM
- PCN
- cellular

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F
2.00	2.00	.75	.938	.13	1.750
50.80	50.80	19.05	23.83	3.30	44.45

G	H	J	K	wt
.125	.38	1.00	1.25	grams
3.18	9.65	25.40	31.75	145.0

Directional Coupler Electrical Specifications

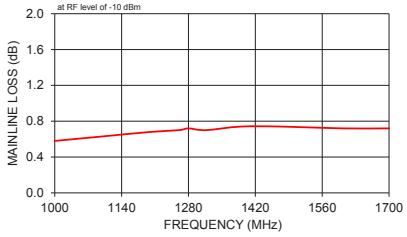
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS[1] (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
f_L-f_U	Nom.	Flatness	Typ.	Max.	Typ.	Min.	Typ.	Max.
1000-1700	9.8±0.5	±1.0	0.8	1.3	25	17	1.2	5

1. Mainline loss includes theoretical power loss at coupled port.

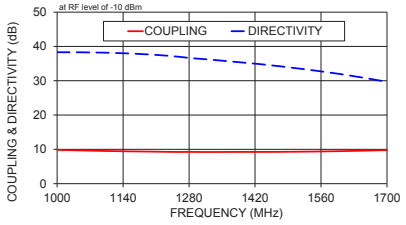
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB) In	Return Loss (dB) Out	Return Loss (dB) Cpl
1000.00	0.58	9.85	38.31	31.32	30.87	23.36
1100.00	0.63	9.53	38.19	30.16	30.58	22.92
1200.00	0.68	9.34	37.62	29.39	30.42	22.73
1260.00	0.70	9.23	36.96	29.10	30.38	22.75
1280.00	0.72	9.26	36.64	29.01	30.40	22.78
1315.00	0.70	9.22	36.26	28.90	30.39	22.86
1390.00	0.74	9.25	35.35	28.76	30.40	23.13
1475.00	0.74	9.27	34.18	28.76	30.40	23.66
1600.00	0.72	9.47	31.97	28.71	30.43	24.84
1700.00	0.72	9.78	29.69	27.81	30.57	26.16

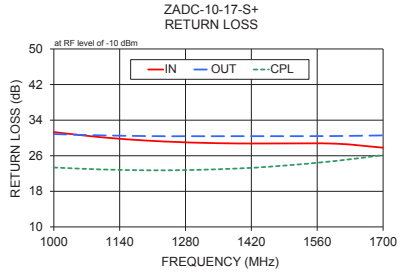
ZADC-10-17-S+
MAINLINE LOSS



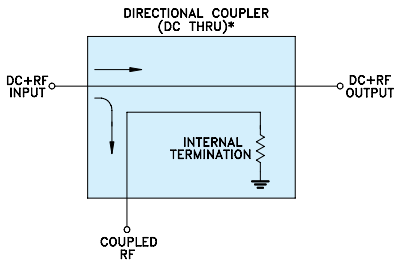
ZADC-10-17-S+
COUPLING & DIRECTIVITY



ZADC-10-17-S+
RETURN LOSS



Electrical Schematic



* ELECTRICAL SCHEMATIC FOR DIRECTIONAL COUPLER THAT IS DESIGNED WITHOUT INTERNAL TRANSFORMERS.

Notes

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp