DC Pass

Directional Coupler

ZADC-10-17W-S+

50Ω Up to 5W 800 to 1900 MHz



Generic photo used for illustration purposes only

CASE STYLE: CC51-1

Connectors	Model
SMA	ZADC-10-17W-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

- low mainline loss, 0.8 dB typ.
- excellent directivity, 24 dB typ.
- power input up to 5W
- DC Current through input to ouput 1.0A Max.

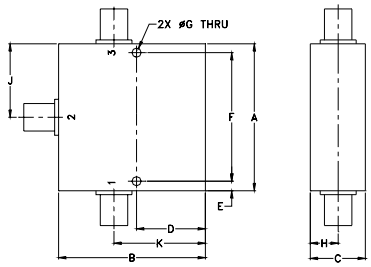
Applications

- GSM
- PCN
- instrumentation
- 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

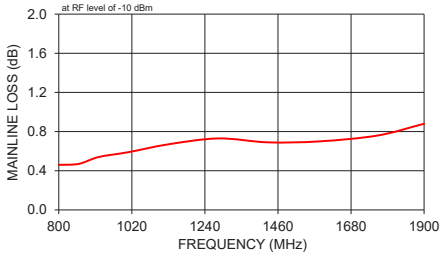
FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS[1] (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
f_L-f_U	Nom.	Flatness	Typ.	Max.	Typ.	Min.	Typ.	Max.
800-1900	10.2±1.0	±1.5	0.8	1.3	24	14	1.2	5

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

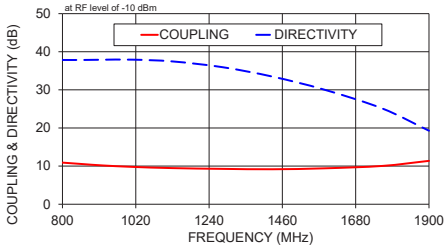
Typical Performance Data

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
800.00	0.46	10.91	37.84	34.63	32.15	24.73
860.00	0.47	10.53	37.84	33.28	31.66	24.16
920.00	0.54	10.17	37.90	32.15	31.33	23.71
1010.00	0.59	9.79	37.92	30.90	30.94	23.20
1130.00	0.67	9.47	37.46	29.82	30.75	22.90
1280.00	0.73	9.27	35.95	29.13	30.74	23.04
1430.00	0.69	9.17	33.48	29.05	30.62	23.82
1585.00	0.70	9.41	30.07	29.16	30.26	25.37
1760.00	0.76	10.04	25.11	26.85	28.37	28.28
1900.00	0.88	11.37	19.28	19.91	22.86	30.51

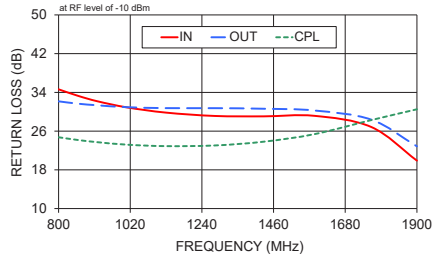
ZADC-10-17W-S+
MAINLINE LOSS



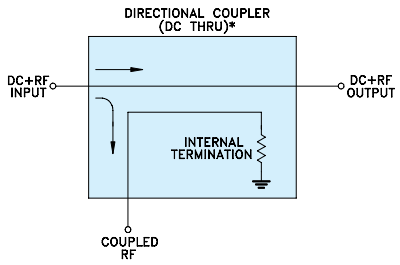
ZADC-10-17W-S+
COUPLING & DIRECTIVITY



ZADC-10-17W-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.
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