

DC Pass Directional Coupler

50Ω Up to 4W 2500 to 6000 MHz

ZADC-10-63+



CASE STYLE: CC1266

Connectors	Model	Price	Qty.
SMA	ZADC-10-63-S+	\$49.95 ea.	(1-9)

+RoHS Compliant

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

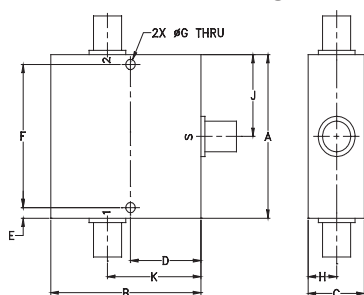
Maximum Ratings

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

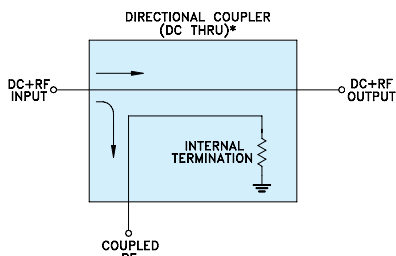
Outline Drawing



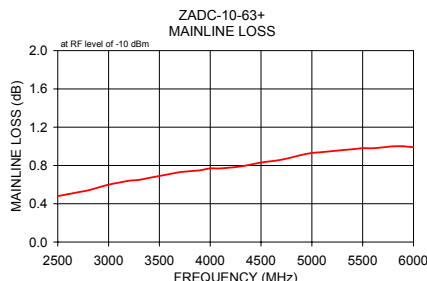
Outline Dimensions (inch/mm)

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	200.0	

Electrical Schematic



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



Features

- excellent directivity, 20 dB typ.
- good VSWR, 1.40 typ.
- power input up to 4W
- low cost
- DC current through input to output 1.0A Max.

Applications

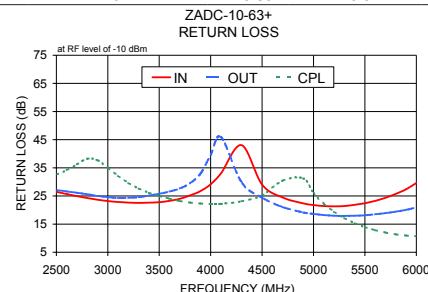
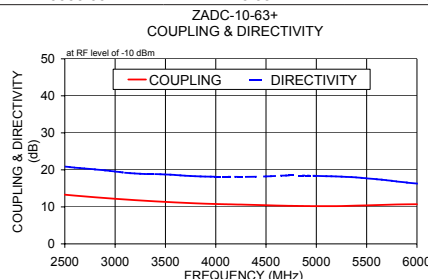
- instrumentation
- ISM
- defense communications
- federal communications
- fixed satellite

Electrical Specifications at 25°C

Parameter	Condition (MHz)	Min.	Typ.	Max.	Unit
Frequency Range		2500	—	6000	MHz
Mainline Loss (above theoretical 0.3 dB)	2500 3500 5000 6000	— — — —	0.2 0.4 0.6 0.7	0.7 0.9 1.1 1.2	dB
Coupling	2500 - 6000 2500 3500 5000 6000	— 12.4 10.4 9.3 9.7	11.7 13.4 11.4 10.3 10.7	15.0 12.5 11.3 11.7	dB
Coupling Flatness(±)	2500 - 3500 3500 - 5000 5000 - 6000	— — —	1.0 0.6 0.3	1.5 1.0 0.8	dB
Directivity	2500 3500 5000 6000	17 13 12 10	23.0 21.8 20.6 16.6	— — — —	dB
Return Loss (Input)	2500 3500 5000 6000	20 18 15 15	30 25 22 22	— — — —	dB
Return Loss (Output)	2500 3500 5000 6000	19 18 14 14	31 29 19 19	— — — —	dB
Return Loss (Coupling)	2500 3500 5000 6000	19 18 14 8	32 27 25 11	— — — —	dB
Input Power	2500 - 6000	—	—	4.0	W

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB) In	Return Loss (dB) Out	Cpl
2500.00	0.48	13.28	20.90	26.47	27.12	32.61
2800.00	0.54	12.59	20.13	24.27	25.60	38.24
3000.00	0.60	12.19	19.55	23.20	24.58	35.00
3500.00	0.69	11.34	18.75	22.79	25.76	24.94
4000.00	0.77	10.78	18.15	29.15	39.56	22.16
4500.00	0.83	10.44	18.22	29.05	24.41	25.25
5000.00	0.93	10.19	18.37	21.78	18.62	26.09
5500.00	0.98	10.41	17.71	22.43	18.14	13.93
5800.00	1.00	10.64	16.88	25.73	19.41	11.34
6000.00	0.99	10.71	16.27	29.59	20.91	10.70



Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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