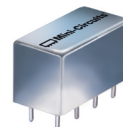


Plug-In

Directional Coupler

50Ω 800 to 900 MHz

PDC20-900HP



Maximum Ratings

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

Pin Connections

INPUT	1
OUTPUT	4
COUPLED	3
GROUND	2,5,7,8
CASE GROUND	2,5,7,8
NOT USED	6

Features

- high power, up to 5W power input
- low mainline loss, 0.25 dB typ.
- excellent directivity, 24 dB typ.
- up to 5W input power
- rugged welded construction, hermetically sealed

CASE STYLE: A01

PRICE: \$42.20 ea. QTY. (1-9)

Applications

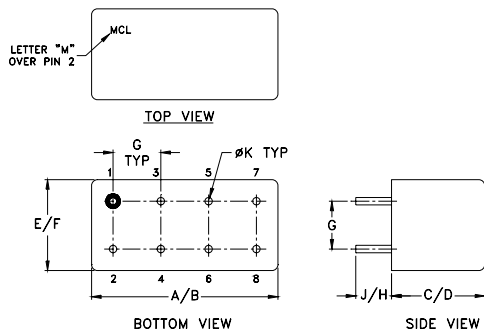
- cellular
- power levelling & monitoring
- VSWR measurement

Directional Coupler Electrical Specifications

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT, W
	Nom.	Flatness	Typ.	Max.	Typ.	Min.		
800-900	20.2±0.6	±0.5	0.25	0.5	24	20	1.1	5.0

1. Mainline loss includes theoretical power loss at coupled port.
External heat sinking is recommended to reduce case temperature.

Outline Drawing



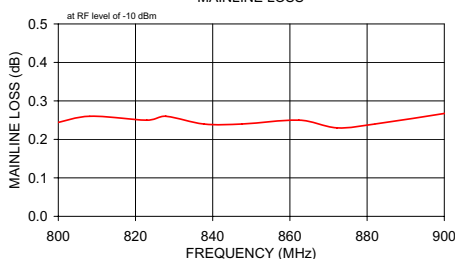
Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K		wt
.200	.20	.14	.031		grams
5.08	5.08	3.56	0.79		5.2

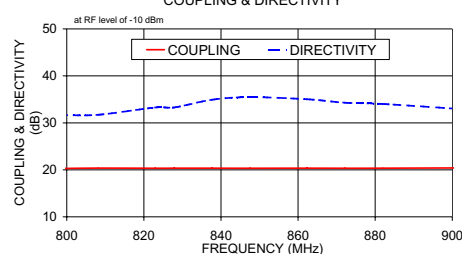
Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
798.30	0.24	20.29	31.66	26.98	27.43	19.83
808.15	0.26	20.37	31.73	26.72	27.09	19.72
822.92	0.25	20.34	33.28	26.34	26.60	19.54
827.85	0.26	20.35	33.28	26.22	26.44	19.50
837.70	0.24	20.35	34.93	25.98	26.16	19.40
847.55	0.24	20.34	35.48	25.76	25.86	19.30
862.32	0.25	20.35	35.03	25.45	25.49	19.18
872.17	0.23	20.33	34.30	25.22	25.24	19.10
882.02	0.24	20.36	34.02	25.01	24.96	19.02
901.72	0.27	20.41	32.97	24.62	24.54	18.87

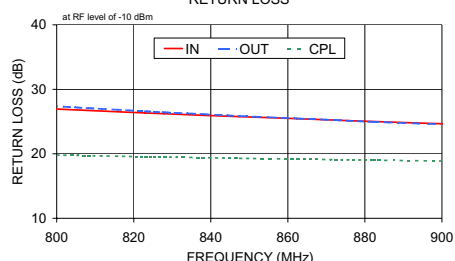
PDC20-900HP
MAINLINE LOSS



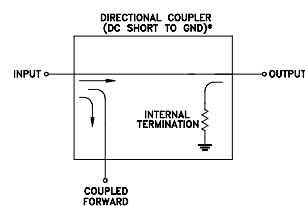
PDC20-900HP
COUPLING & DIRECTIVITY



PDC20-900HP
RETURN LOSS



Electrical Schematic



* ELECTRICAL SCHEMATIC IS FOR DIRECTIONAL COUPLER WITH INTERNAL TRANSFORMER(S) THAT ROUTES DC FROM RF PORTS TO GROUND.

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.
- 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



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