

50Ω

Up to 10W

800 to 900 MHz

Maximum Ratings

Operating Temperature -55°C to 100°C

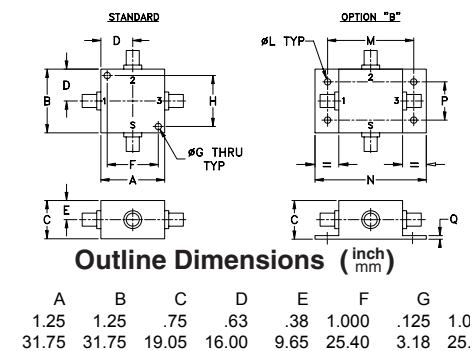
Storage Temperature -55°C to 100°C

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

Coaxial Connections

INPUT	2
OUTPUT	3
COUPLED (forward)	1
COUPLED (reverse)	S

Outline Drawing



Features

- very low mainline loss, 0.1 dB typ.
- excellent directivity, 28 dB typ.
- excellent VSWR, 1.1: typ.
- high power operation, 10W

Applications

- VSWR measurement
- power monitoring of cellular transmitters
- power levelling



CASE STYLE: J17

Connectors Model
SMA ZFBDC20-900HP
BRACKET (OPTION "B")

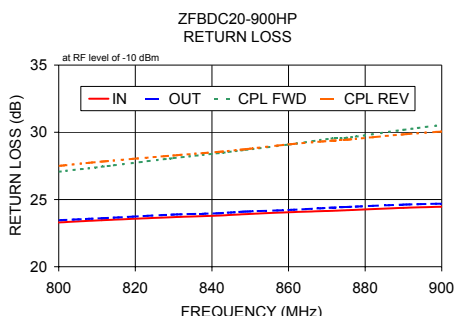
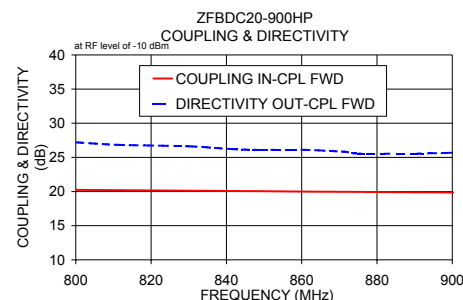
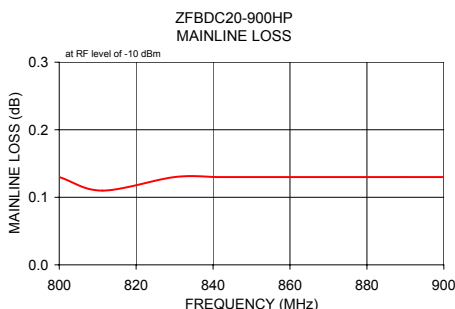
Bi-Directional Coupler Electrical Specifications

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)		DIRECTIVITY (dB)		VSWR (:1)	POWER INPUT (W)
f_c - f_u	Nom.	Flatness	Typ.	Max.	Typ.	Min.	Typ.	Max.
800-900	20.7±0.6	±0.6	0.1	0.4	28	20	1.1	10

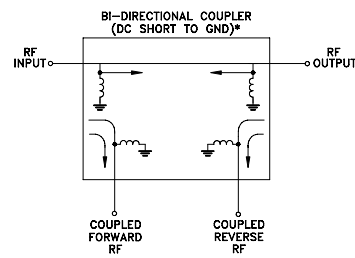
1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB)		Coupling (dB)		Directivity (dB)		Return Loss (dB)			
	In-Out	In-Cpl Fwd	Out-Cpl Rev	Out-Cpl Fwd	In-Cpl Rev	In	Out	Cpl Fwd	Cpl Rev	
800.00	0.13	20.24	20.31	27.20	24.84	23.29	23.46	27.07	27.50	
811.25	0.11	20.20	20.24	26.84	25.58	23.46	23.61	27.44	27.82	
830.00	0.13	20.13	20.19	26.62	25.41	23.69	23.88	28.08	28.28	
841.25	0.13	20.08	20.15	26.22	25.63	23.80	23.97	28.43	28.53	
848.75	0.13	20.05	20.11	26.10	25.73	23.91	24.10	28.69	28.74	
860.00	0.13	20.00	20.07	26.12	26.00	24.05	24.22	29.09	29.10	
871.25	0.13	19.96	20.03	25.83	26.34	24.16	24.39	29.54	29.37	
875.00	0.13	19.95	20.00	25.57	26.37	24.20	24.44	29.58	29.44	
890.00	0.13	19.89	19.96	25.56	26.84	24.38	24.62	30.18	29.85	
901.25	0.13	19.86	19.91	25.69	26.80	24.47	24.70	30.59	30.08	



Electrical Schematic



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

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/MCStore/terms.jsp

