



Micro Communications, Inc.

Microwave A MICROWAVE TECHNIQUES COMPANY

# DIRECTIONAL COUPLERS

- **Small Size**
- **Adjustable Coupling**
- **High Directivity**
- **External Load**

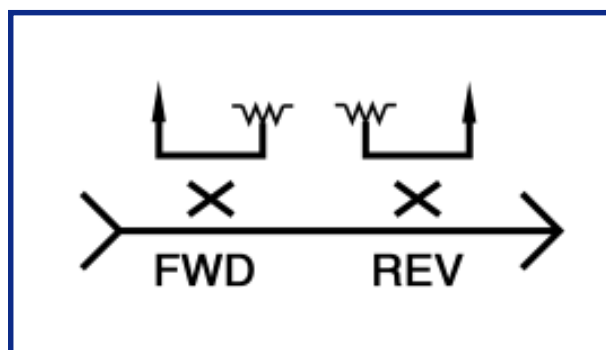
MCI's Directional Loop Couplers are designed to couple signals from a high power transmission line. These signals can be used for alarm circuits, envelope monitoring, frequency monitoring, forward and reverse wave monitoring, and a multitude of other operations.

The High Power Loop Coupler has an external load and can measure either forward or reverse power without rotation by manually repositioning the load. The advantage to utilizing an external load is that the coupler can handle higher power with closer values of coupling and the load can easily be replaced if damage occurs.

To measure forward and reverse power simultaneously, two couplers are required. Since MCI's couplers are very small, a number of single or multiple loops can be mounted circumferentially or in-line. Each coupler housing is welded to the line, ensuring the factory calibrated value of



coupling. All couplers are adjustable in height and angle to select the desired value of coupling and directivity. Precision built in height and angle scales are installed for presetting. Field installable "saddle" type couplers available also.





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<b>SPECIFICATIONS</b>	
Frequency:	50-1,000 MHz
VSWR:	
Primary Line:	1.05
Secondary Line:	1.10
Coupling Adjustable:	35-80 dB
Directivity:	>30 dB
Impedance:	50

TYPE	LOOP COUPLERS		
	HIGH POWER		
	UNFLANGED	FLANGED	SADDLE TYPE
<b>MODEL</b>	51155	51555	51615
<b>NUMBER OF LOOPS</b>	1	1	1
<b>SIZE</b> in (mm)	10 (254)	10 (254)	10 (254)
<b>CONNECTOR</b> EIA	6 1/8	6 1/8	6 1/8 line
<b>MODEL</b>	51152	51552	51612
<b>NUMBER OF LOOPS</b>	1	1	1
<b>SIZE</b> in (mm)	6 (152)	6 (152)	6 (152)
<b>CONNECTOR</b> EIA	4 1/16	4 1/16	4 1/16 line
<b>MODEL</b>	51154	51554	51614
<b>NUMBER OF LOOPS</b>	1	1	1
<b>SIZE</b> in (mm)	6 (152)	6 (152)	6 (152)
<b>CONNECTOR</b> EIA	3 1/8	3 1/8	3 1/8 line
<b>MODEL</b>	51153	51553	51613
<b>NUMBER OF LOOPS</b>	1	1	1
<b>SIZE</b> in (mm)	6 (152)	6 (152)	6 (152)
<b>CONNECTOR</b> EIA	1 5/8	1 5/8	1 5/8



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