



SURFACE MOUNT

Directional Coupler

TCD-9-1W+

Mini-Circuits

50Ω

5 to 2000 MHz

FEATURES

- Wideband, 5 to 2000 MHz
- Low mainline loss, 1.2 dB typ. (5-1000 MHz)
- Aqueous washable
- Leads for excellent solderability
- Protected by US Patent 6,140,887



Generic photo used for illustration purposes only

CASE STYLE: DB714

APPLICATIONS

- GPS
- Cellular
- Satellite distribution
- CABLE TV

+RoHS Compliant

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

ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range	—	5	—	2000	MHz
Mainline Loss ¹ (above theoretical 0.1 dB)	5-50	—	1.2	2.1	dB
	50-500	—	1.2	1.8	
	500-1000	—	1.5	2.1	
	1000-2000	—	2.5	—	
Coupling	5-1000	—	8.9±0.5	—	dB
	1000-2000	—	8.9±0.5	—	
Coupling Flatness (±)	5-2000	—	±0.6	—	
Directivity	5-50	17	21	—	dB
	50-500	13	17	—	
	500-1000	10	13	—	
	1000-2000	—	10	—	
VSWR	5-1000	—	1.30	—	:1
	1000-2000	—	1.60	—	
Input Power	5-1000	—	—	0.5	W
	1000-2000	—	—	1.0	

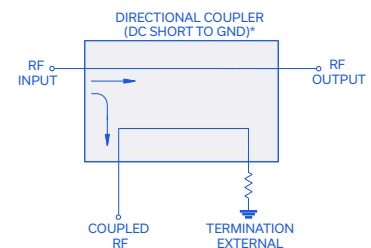
1. Mainline loss includes theoretical power loss at coupled port.

MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to 85°C*
Storage Temperature	-55°C to 100°C

Permanent damage may occur if any of these limits are exceeded.
* Case temperature is defined as temperature on ground leads.

ELECTRICAL SCHEMATIC



*Electrical schematic is for Directional coupler with internal transformer(s) and external termination

Mini-Circuits

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. C
ECO-014559
TCD-9-1W+
WP/CP/AM
220809
PAGE 1 OF 3

