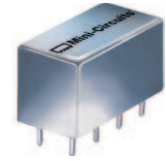


Plug-In Directional Coupler

PDC-10-54+

50Ω 10 to 1500 MHz



CASE STYLE: A01
PRICE: \$38.20 ea. QTY. (1-9)

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.	

Pin Connections

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

Features

- very wideband, 10 to 1500 MHz
- excellent directivity, 28 dB typ.
- rugged welded construction, hermetically sealed

Applications

- cellular/GPS
- VHF/UHF
- defense & federal communications
- wireless

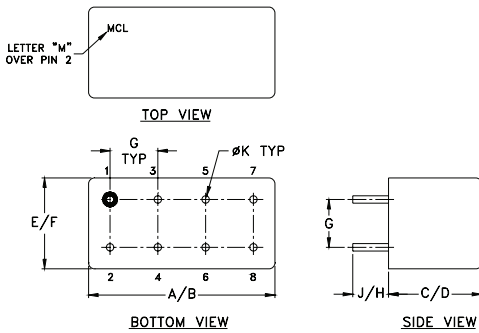
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Directional Coupler Electrical Specifications

FREQ. (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)						VSWR (:1)	POWER INPUT, W	
			L		M		U		L		M		U				
	Nom.	Flatness	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.		Typ.	Max.
10-1500	10.5±0.5	±0.7	1.2	1.8	1.3	1.9	1.6	2.3	35	25	28	23	28	23	1.3	0.5	0.5

L = low range [f_L to $10 f_L$] M = mid range [$10 f_L$ to $f_U/2$] U = upper range [$f_U/2$ to f_U]
1. Mainline loss includes theoretical power loss at coupled port.

Outline Drawing

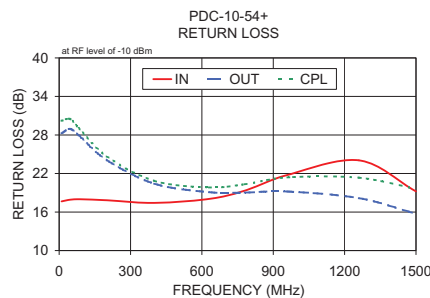
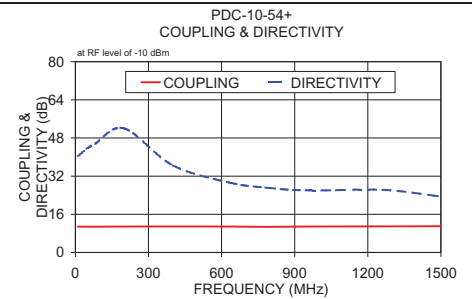
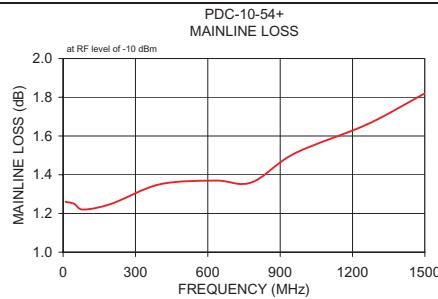


Outline Dimensions (inch/mm)

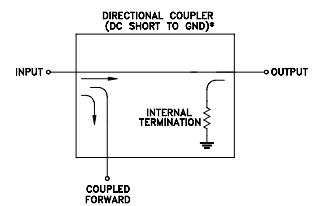
A	B	C	D	E	F
.770	.800	.385	.400	.370	.400
19.56	20.32	9.78	10.16	9.40	10.16
G	H	J	K	wt	
.200	.20	.14	.031	grams	
5.08	5.08	3.56	0.79	5.2	

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)			Cpl
			In	Out	Cpl	
10.00	1.26	10.82	40.27	17.65	28.25	30.22
46.00	1.25	10.80	43.46	17.92	28.96	30.49
82.00	1.22	10.78	45.69	17.99	27.96	29.09
200.00	1.25	10.85	52.06	17.84	24.08	24.67
400.00	1.35	10.88	36.51	17.42	20.42	20.85
630.00	1.37	10.85	29.35	18.04	19.10	19.83
780.00	1.36	10.72	27.18	19.32	19.04	20.32
960.00	1.51	10.85	25.98	21.77	19.19	21.40
1260.00	1.66	10.92	26.26	24.05	18.16	21.35
1500.00	1.82	10.98	23.45	19.22	15.74	19.60



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-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

