

Plug-In Directional Coupler

50Ω

5 to 1000 MHz

TDC-10-2+
TDC-10-2



CASE STYLE: B02
PRICE: \$28.20 ea. QTY (1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

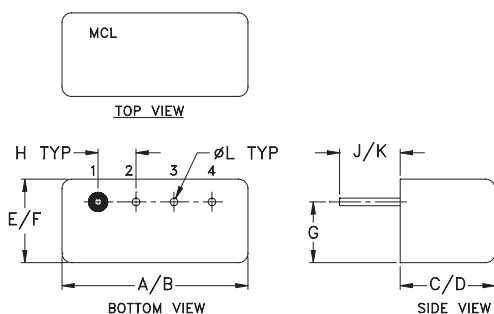
Maximum Ratings

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

Pin Connections

INPUT	1
OUTPUT	2
COUPLED	4
GROUND	3
CASE GROUND	3

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F
.480	.500	.240	.255	.210	.230
12.19	12.70	6.10	6.48	5.33	5.84
G	H	J	K	L	wt
.16	.100	.14	.20	.020	grams
4.06	2.54	3.56	5.08	0.51	1.9

Features

- wideband, 5 to 1000 MHz
- excellent directivity, 25 dB typ.
- rugged welded case, hermetically sealed

Applications

- VHF/UHF
- instrumentation
- communication receivers & transmitters

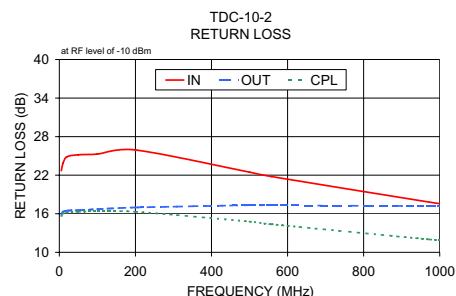
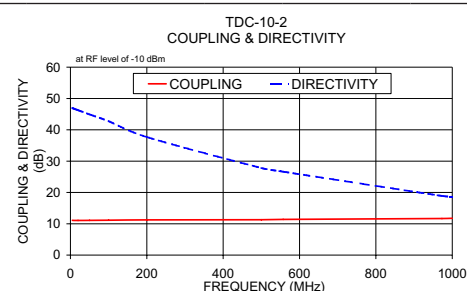
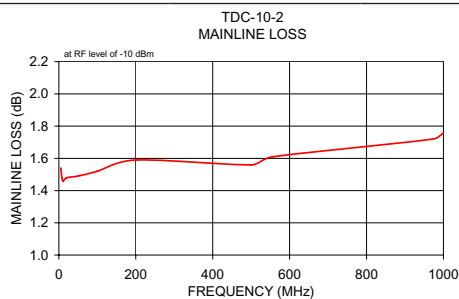
Directional Coupler Electrical Specifications

FREQ. RANGE (MHz)	COUPLING (dB)		MAINLINE LOSS ¹ (dB)						DIRECTIVITY (dB)			VSWR (:1)	POWER INPUT, W				
	Nom.	Flatness	L		M		U		L		M		U	Typ.	Max.	Max.	
			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.		Min.				Typ.
f _L -f _U																	
5-1000	11.0±0.5	±0.6	1.4	1.8	1.5	1.8	1.6	2.0	50	35	25	20	20	15	1.5	0.5	0.5

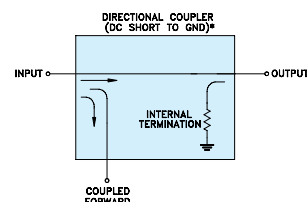
L = low range [f_L to 10 f_L] M = mid range [10 f_L to f_U/2] U = upper range [f_U/2 to f_U]
1. Mainline loss includes theoretical power loss at coupled port.

Typical Performance Data

Frequency (MHz)	Mainline Loss (dB) In-Out	Coupling (dB) In-Cpl	Directivity (dB)	Return Loss (dB)		
				In	Out	Cpl
5.00	1.54	11.12	46.98	22.70	15.85	15.65
10.00	1.46	11.07	46.73	23.89	16.30	16.03
20.00	1.48	11.07	46.28	24.86	16.48	16.22
50.00	1.49	11.09	44.93	25.17	16.57	16.32
100.00	1.52	11.13	42.76	25.29	16.72	16.38
200.00	1.59	11.25	37.70	25.93	16.98	16.31
500.00	1.56	11.29	27.82	22.47	17.33	14.79
557.11	1.61	11.38	26.63	21.79	17.30	14.37
972.94	1.72	11.67	18.90	17.81	17.20	12.01
1000.00	1.76	11.75	18.62	17.57	17.20	11.89



Electrical Schematic



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

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