



## DESIGNER'S KIT K4-DBTC-75L+

# Directional Couplers

50Ω 5 to 1500MHz

### FEATURES

- Very broadband, multi-octave, 75 Ω
- Very flat 9, 10, 12, 13, 16 and 18dB coupling
- Temperature stable LTCC base
- All welded construction
- Micro-miniature leaded package (L).166" x (W).150" x (H).155

MINI-CIRCUITS DESIGNER'S KITS  
**SPEED UP**  
THE SOLUTION



### K4-DBTC-75L+ ELECTRICAL SPECIFICATIONS

(kit includes 6 models, 5 of each, 30 total)

Model	Freq. (MHz) $f_L$ - $f_U$	Coupling (dB) Nom. Max Flatness		Mainline Loss <sup>1</sup> (dB)								Directivity (dB)								VSWR (:1) Typ.	Power Input (W)		
				L		M		U		U1		L		M		U		U1			L	MU	U1
				Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.		Typ.	Max.	Max.
DBTC-9-4-75L+	5 - 1200	9.3±0.5	±0.7	1.3	1.8	1.4	1.9	1.5	2.1	1.8	2.4	20	16	19	16	18	15	17	12	1.5	0.5	0.5	0.5
DBTC-10-4-75L+	5 - 1000	10.5±0.5	±0.7	1.5	2.2	1.4	2.0	1.5	2.0	—	—	21	16	20	13	16	—	—	—	1.3	0.5	1.0	—
DBTC-12-4-75L+	5 - 1200	12±0.5	±0.6	1.1	1.8	1.1	1.4	1.2	1.6	1.3	1.9	19	17	18	15	17	10	13	8	1.3	0.5	1.0	1.0
DBTC-13-5-75L+	5 - 1000	13.2±0.5	±0.6	0.9	1.4	1.0	1.5	1.1	1.6	—	—	21	17	19	14	18	—	—	—	1.3	0.5	1.0	—
	1000 - 1500	13.6±0.5	±0.8	—	—	—	—	—	—	1.4	2.2	—	—	—	—	—	—	17	—	1.3	—	—	1.0
DBTC-16-5-75L+	5 - 1000	16.3±0.5	±0.7	1.2	2.0	1.0	1.5	1.1	1.6	—	—	22	16	21	13	20	—	—	—	1.3	0.5	1.0	—
	1000 - 1500	16.8±0.7	±0.7	—	—	—	—	—	—	1.3	1.9	—	—	—	—	—	—	19	—	1.3	—	—	1.0
DBTC-18-4-75L+	5 - 1000	18.2±0.5	±0.7	0.8	1.5	0.8	1.4	1.0	1.6	—	—	25	16	21	14	15	—	—	—	1.3	1.0	1.0	—

L = 5-50MHz, M = 50-500MHz, U = 500-1000MHz, For DBTC-13-5-75L+ & DBTC-16-5-75L+: U1 = 1000-1500MHz, For DBTC-9-4-75L+ & DBTC-12-4-75L+: U1 = 1000-1200MHz

Protected under U.S. Patents 6,140,887 & 6,784,521

1. Includes theoretical power loss due to coupling.

