



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 ¹ (dB)								Directivity (dB)								VSWR (:1)	Power Input (W)		
				L		M		U		U1		L		M		U		U1			L	MU	U1
		Typ.	Max.	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.

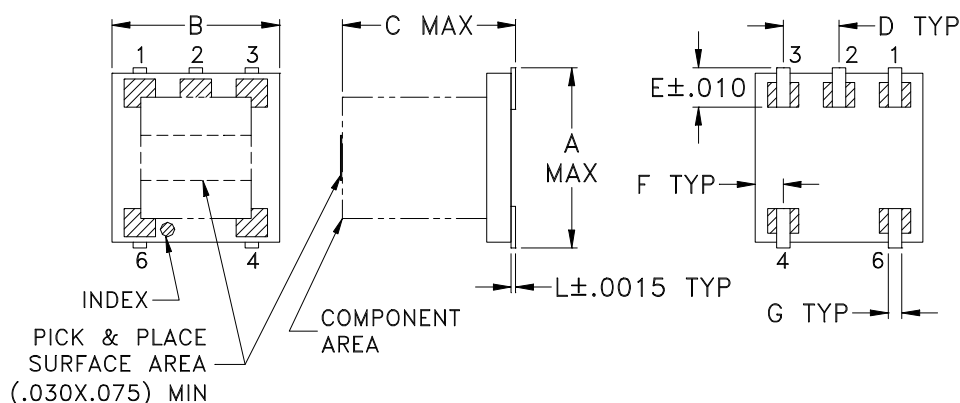


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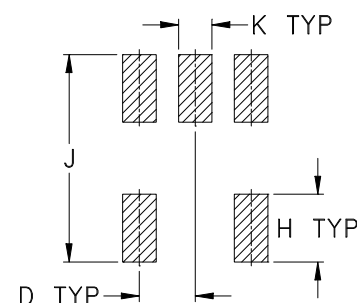
REV. OR
M105868
K4-DBTC-75L+
210330

Outline Dimensions

AT1030



PCB Land Pattern



Suggested Layout,
Tolerance to be within $\pm .002$

CASE #	A	B	C	D	E	F	G	H	J	K	L	WT. GRAMS
AT1030	.166 (4.22)	.150 (3.81)	.155 (3.94)	.050 (1.27)	.037 (0.94)	.025 (0.64)	.012 (0.30)	.060 (1.52)	.184 (4.67)	.030 (0.76)	.004 (0.10)	.10

Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .01$; 3 Pl. $\pm .005$

Notes:

- Open style, ceramic base.
- Termination finish:
For RoHS Case Styles: Tin plate.
For RoHS-5 Case Styles: Tin-Lead plate.



P.O. Box 350186, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site

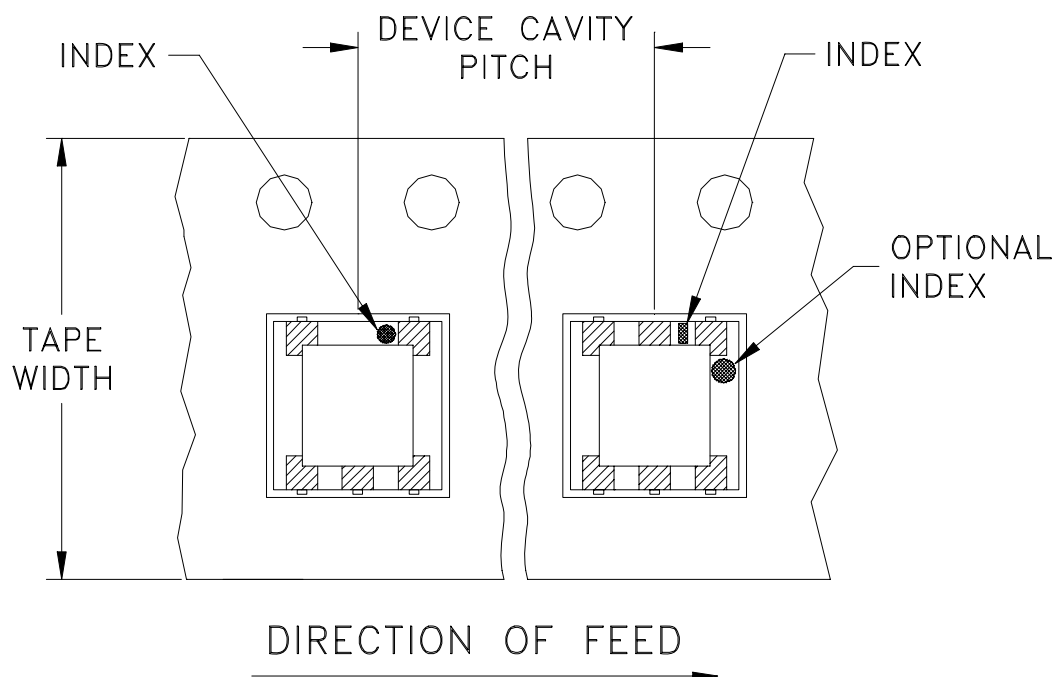


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RF/IF MICROWAVE COMPONENTS

Tape & Reel Packaging TR-F76

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel
12	8	7	20
			50
			100
			200
			500
		13	1000
			2000

Note: Please consult individual model data sheet to determine device per reel availability.

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

Go to: www.minicircuits.com/pages/pdfs/tape.pdf



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