



DESIGNER'S KIT K1-DBTC+

Directional Couplers

Mini-Circuits

50Ω 5 to 2000 MHz

FEATURES

- Very Flat 9 to 20dB Coupling
- Very broadband, multi-octave, 50Ω
- Temperature stable LTCC base
- All welded construction
- Micro-miniature leadless package 150" x .150" x .150"

MINI-CIRCUITS DESIGNER'S KITS
SPEED UP
THE SOLUTION



K1-DBTC+ ELECTRICAL SPECIFICATIONS

(kit includes 5 of each model, total 25 pieces)

Model	Freq. (MHz) f _L -f _U	Coupling (dB)		Mainline Loss ¹ (dB)						Directivity (dB)						VSWR (:1) Typ.	Power Input (W)	
		Nom.	Max Flatness	L		M		U		L		M		U			L	MU
				Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.			
DBTC-9-4+	5-1000	9.0±0.5	±0.5	1.2	2.0	1.2	1.8	1.5	2.0	21	17	18	13	15	—	1.20	0.5	1.0
DBTC-12-4+	5-1000	12.2±0.5	±0.9	0.9	1.8	0.7	1.3	1.1	1.6	33	22	21	14	15	—	1.20	0.5	1.0
DBTC-13-4+	5-1000	13.0±0.5	±0.6	0.7	1.3	0.7	1.3	1.1	1.6	21	17	18	13	13	—	1.20	0.5	1.0
DBTC-17-5+	50-2000	17.7±0.9	±1.0	0.9	1.4	0.9	1.4	1.1	1.6	20	13	20	13	14	—	1.20	—	2.0
DBTC-20-4+	20-1000	20.4±0.6	±0.8	0.3	1.0	0.4	1.0	0.7	1.3	21	13	21	14	16	—	1.20	1.0	1.0

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

1. Includes theoretical power loss due to coupling.

L = low range [f_L to $10f_L$]

M = mid range [$10f_L$ to $f_U/2$]

U=upper range [$f_U/2$ to f_U]

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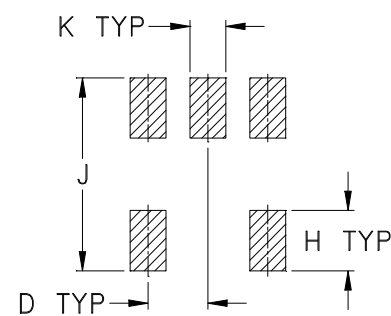
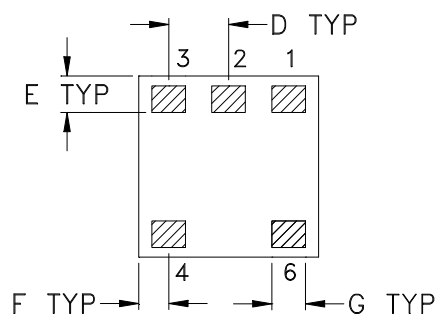
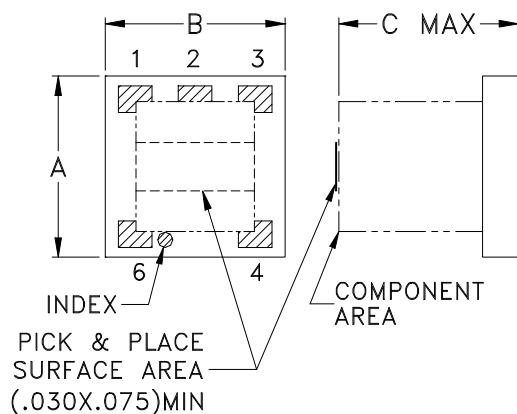
www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. B
ECO-009188
M105265
K1-DBTC+
MCL NY
210812

Outline Dimensions

AT790-1

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
AT790-1	.150 (3.81)	.150 (3.81)	.150 (3.81)	.050 (1.27)	.030 (0.76)	.025 (0.64)	.028 (0.71)	.050 (1.27)	.160 (4.06)	.030 (0.76)	-- --	.10

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

Notes:

1. Open style, Ceramic base.
2. Termination finish: Silver palladium or gold over nickel based on stock availability



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site

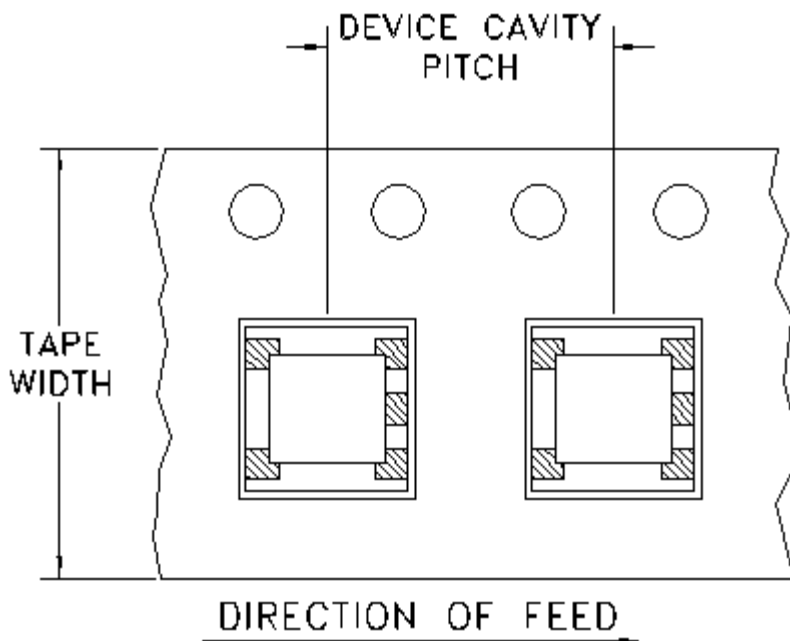


The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS

Tape & Reel Packaging TR-F17

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel	
12	8	7	Small quantity standards (see note)	20
				50
				100
				200
				500
		13	Standard	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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