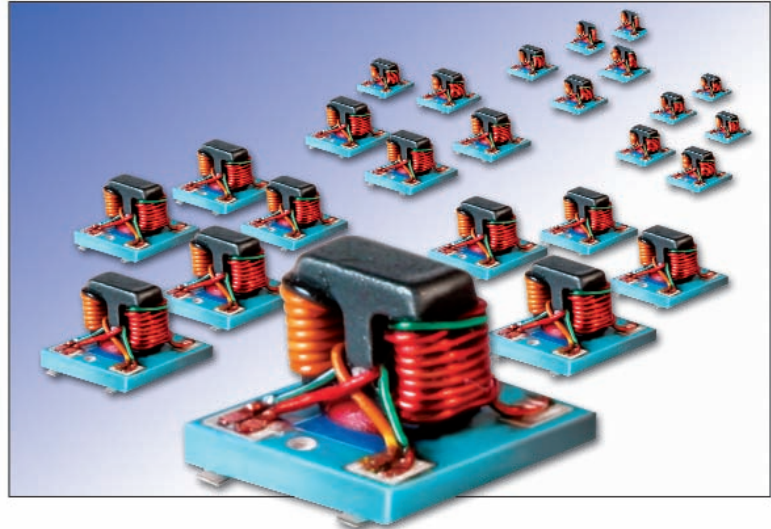


# DIRECTIONAL COUPLERS

## Designer's Kit K3-DBTC-L+

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



### 5 to 2000MHz

#### DBTC-L+ Features

- Very flat 9 to 20dB coupling
- Very broadband, multi-octave, 50Ω
- Temperature stable LTCC base
- All welded construction
- Micro-miniature package with leads  
(L).166" x (W).150" x (H).155"



**only \$54<sup>95</sup> ea. kit** (5 models, 5 of each, 25 total)

#### Kit K3-DBTC-L+ Electrical specifications of each model

| Model       | Freq.<br>(MHz) | Coupling<br>(dB) |                  | Mainline Loss*<br>(dB) |      |      |      |      |      | Directivity<br>(dB) |      |      |      |      |      | VSWR<br>(:1) | Power Input<br>(W) |           |            |
|-------------|----------------|------------------|------------------|------------------------|------|------|------|------|------|---------------------|------|------|------|------|------|--------------|--------------------|-----------|------------|
|             |                | Nom.             | Max.<br>Flatness | L                      |      | M    |      | U    |      | L                   |      | M    |      | U    |      |              | Typ.               | L<br>Max. | MU<br>Max. |
|             |                |                  |                  | Typ.                   | Max. | Typ. | Max. | Typ. | Max. | Typ.                | Min. | Typ. | Min. | Typ. | Min. |              |                    |           |            |
| DBTC-9-4L+  | 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-12-4L+ | 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-13-4L+ | 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-17-5L+ | 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-20-4L+ | 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       |            |

L = low range [ $f_L$  to  $10f_L$ ]    M = mid range [ $10f_L$  to  $f_U/2$ ]    U=upper range [ $f_U/2$  to  $f_U$ ]

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

\*Includes the theoretical power loss due to coupling.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For quick access to product information see MINI-CIRCUITS CATALOG & WEB SITE

RF/IF MICROWAVE COMPONENTS

REV. OR  
M105157  
K3-DBTC-L+