

# Common Mode Choke Coil Inductors

**Leaded type common mode inductor Chokes  
clean up high-speed signals (TCB7T)**

▶ **Preview**

Token TCB7T series wire-wound common-mode choke coil includes a magnetic core having a winding core portion and a pair of flanges provided at respective ends of the winding core portion, external electrodes provided on the respective flanges, a pair of windings wound around the winding core portion, each end of the pair of the windings being extended and connected to the external electrode.

For designers seeking to suppress common mode noise on high speed differential signal lines, without distortion, Token has announced the TCB7T Series of compact through hole common-mode choke coils. Taking advantage of Token's advanced winding technology and superior ferrite materials, the TCB7T coils are ultracompact and provide accurate transmission of high-speed differential signals.

Common mode choke coil circuits are increasingly being used for the effective suppression of common mode noise without distorting the waveform of high-speed signals. The TCB7T wirewound coils measure just 7.2 x 7.1 x 4.5 mm in maximum profile, with a tight  $\pm 0.5$  mm dimensional tolerance, making them ideal for today's high speed products, particularly those incorporating double balance mixers, impedance transformers, broad-band transformers applications.

Custom parts are available on request. Token will also produce devices outside these specifications to meet specific customer requirements, please contact our sales for more information.

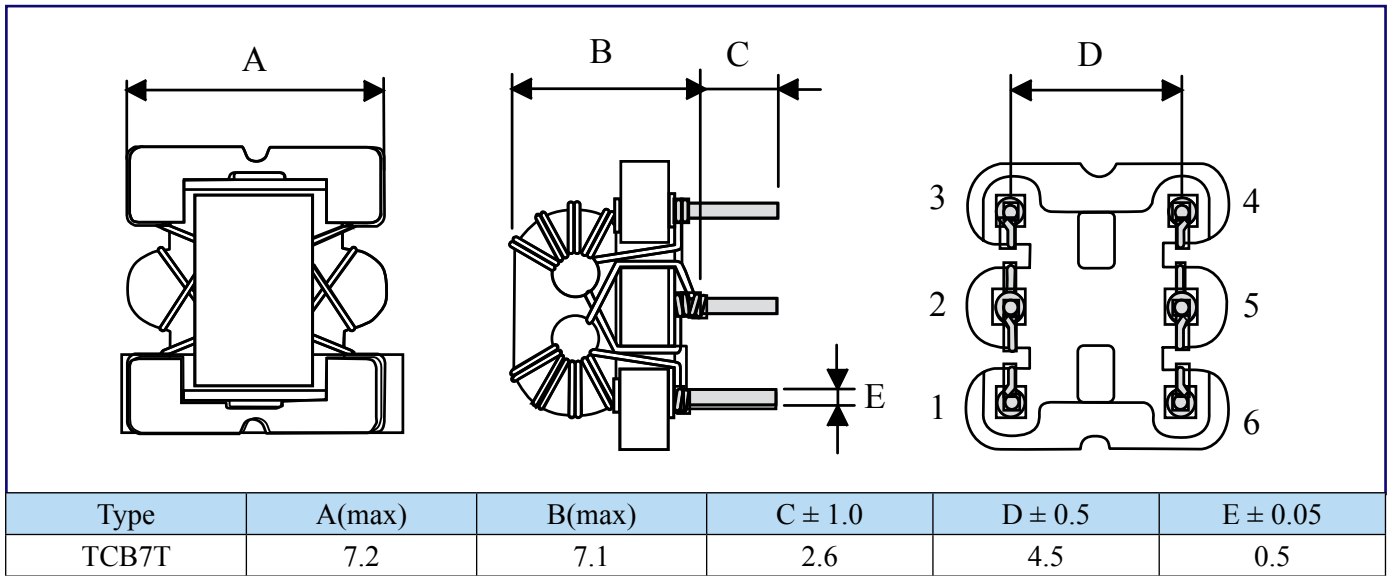
**Features :**

- Pair wire coil for high stability.

**Applications :**

- Double balance mixers, impedance transformers.
- broad-band transformers.

## Configurations & Dimensions

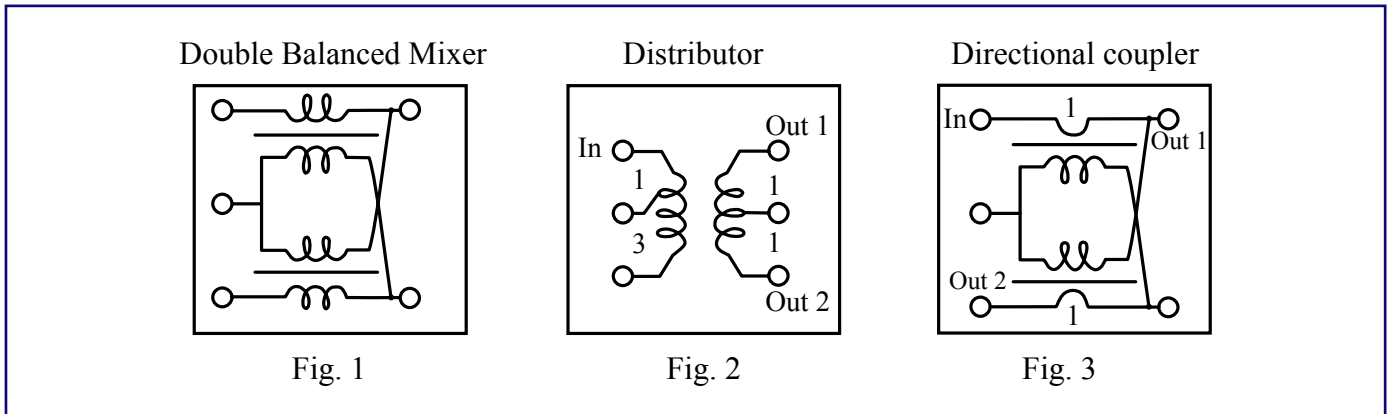


**Note:** Design as Customer's Requested Specifications

## Electrical Characteristics

Part Number	Winding Turns	Operating Freq. Ranges ( MHz )	Insertion Loss (dB)	Figure
<b>Double balanced mixer</b>				
TCB7T - 456DB1013	1	50 ~ 400	10dB(max)	1
TCB7T - 456DB1014	2	10 ~ 1.0 GHz	6dB(max)	1
TCB7T - 456DB1005	3	8 ~ 800	3.5dB(max)	1
TCB7T - 456DB1006	4	6 ~ 600	2.5dB(max)	1
TCB7T - 456DB1007	5	5 ~ 500	2dB(max)	1
TCB7T - 456DB1009	2	400 ~ 1.3 GHz	4dB(max)	1
<b>Distributor</b>				
TCB7T - 456DS1012	-	20 ~ 600	In to Out-1,2 4.5dB(max) Out-1 to Out-2 (Isolation)10dB(min)	2
<b>Directional coupler</b>				
TCB7T - 456PS1015	4	6 ~ 600	In to Out-1 1.3dB(max) In to Out-2 11dB-14dB	3
TCB7T - 456PS1016	5	6 ~ 600	In to Out-1 0.9dB(max) In to Out-2 13dB-16dB	3
TCB7T - 456PS1011	6	6 ~ 600	In to Out-1 0.8dB(max) In to Out-2 15dB-17dB	3

## ▶ Pin connections Diagram



## ▶ How to Order

TCB7T

❶

❶ Part Number: TCB7T

456DB1013

❷

❷ Type

Code	Type
456DS	Distributor
456PS	Directional coupler
456DB	Double balance mixer

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