



SMD Coils

Common Mode Choke Coils - TCB5F Series

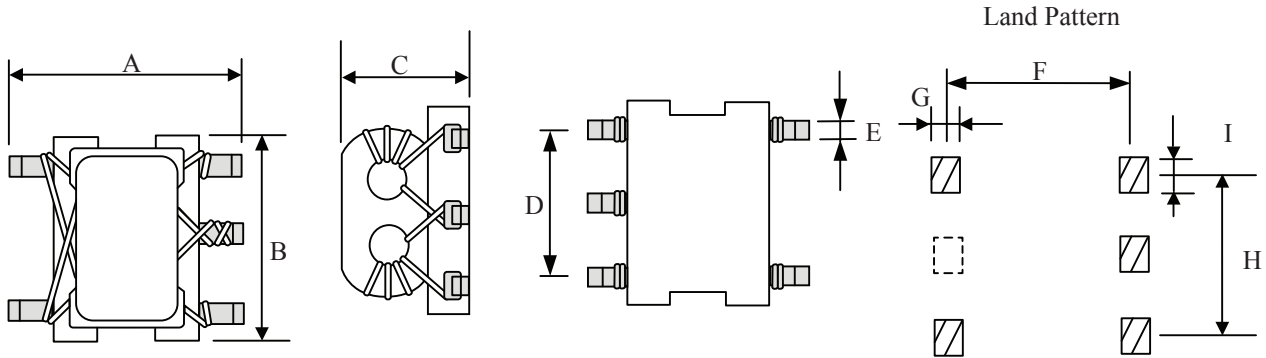
Common Mode Choke Coil Features

Pair wire coil for high stability.

Applications

Double balance mixers, broad-band transformers;
Impedance transformers, balun transformers, etc..

Common Mode Choke Coil Configurations & Dimensions (unit: mm)



Type	A(max)	B(max)	C(max)	D±0.5	E±0.05	F	G	H	I
TCB5F	6.9	6.9	4.7	4.0	0.6	5.5	1.3	4.0	1.0

Note: Design as Customer's Requested Specifications.

Common Mode Choke Coil Electrical Characteristics for TCB5F Series

Part Number	Winding Turns	Operating Freq. Ranges (MHz)	Insertion Loss (dB)	Figure
Double balanced mixer				
TCB5F - 458DB1012	1	50 ~ 400	10(max)	1
TCB5F - 458DB1013	2	10 ~ 1.0GHz	6(max)	1
TCB5F - 458DB1003	3	8 ~ 800	3.5(max)	1
TCB5F - 458DB1008	4	6 ~ 600	2.5(max)	1
TCB5F - 458DB1011	5	5 ~ 500	2(max)	1
TCB5F - 458DB1005	2	400 ~ 1.3GHz	4(max)	1
Distributor				
TCB5F - 458DS1014	-	20 ~ 600	In to Out-1,2 4.5dB(max) Out-1 to Out-2 (Isolation) 10dB(min)	3
Directional coupler				
TCB5F - 458PS1015	4	6 ~ 600	In to Out-1 1.3dB(max) In to Out-2 11dB-14dB	4
TCB5F - 458PS1006	5	6 ~ 600	In to Out-1 0.9dB(max) In to Out-2 13dB-16dB	4
TCB5F - 458PS1007	6	6 ~ 600	In to Out-1 0.8dB(max) In to Out-2 15dB-17dB	4

Continued on the following page. ↘



SMD Coils

Continued from the preceding page.

Part Number	Winding Turns		Operating Freq. Ranges (MHz)	Insertion Loss (dB)	Figure
	Pri.	Sec.			
Frequency mixer					
TCB5F - 458PT1085	1 × 2	1	-	3	2
TCB5F - 458PT1052	2 × 2	2	9 ~ 350	3	2
TCB5F - 458PT1024	3 × 2	3	3.5 ~ 470	3	2
TCB5F - 458PT1086	4 × 2	4	2.2 ~ 400	3	2
TCB5F - 458PT1087	5 × 2	5	1.5 ~ 300	3	2

Common Mode Choke Coil Pin connections Diagram

Double Balanced mixer

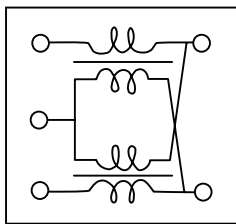


Fig.1

Transformer

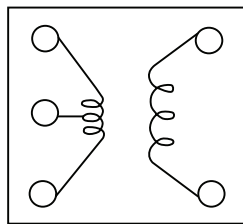


Fig.2

Distributor

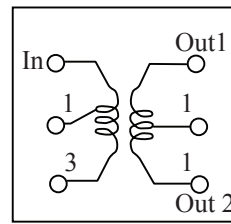


Fig.3

Directional coupler

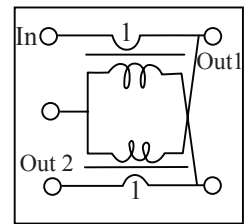


Fig.4

How to Order

TCB5F

-

458DB1012

①

②

① SMD Common Mode Choke Coils

② Type

Code	Type
458DB	Double balance mixer
458DS	Distributor
458PS	Directional coupler
458PT	Frequency mixer

