



SMD Coils

Choke Coils SMD Common Mode - TCB5F Series / 共模电感线圈

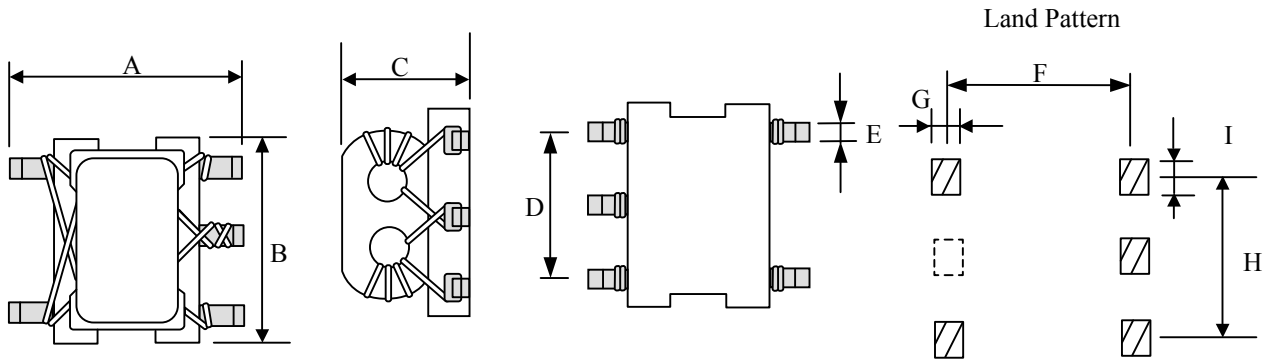
Common Mode Choke Features

Pair wire coil for high stability.

Applications

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

Common Mode Choke 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 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 |

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| 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 Pin connections Diagram

Double Balanced mixer

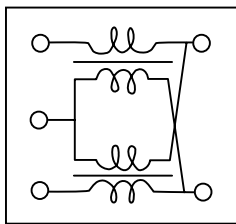


Fig.1

Transformer

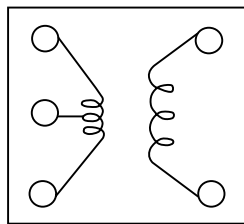


Fig.2

Distributor

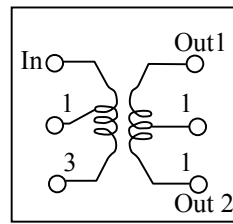


Fig.3

Directional coupler

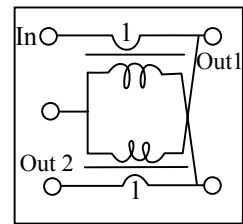


Fig.4

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 |