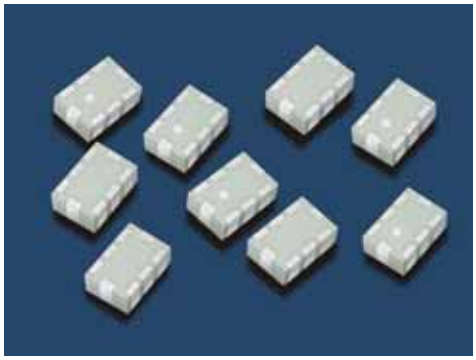
FB2012 Series

Multilayer Chip Band Pass Filter + Balun

AVX Advanced Ceramic X

Features

❖ Monolithic SMD with small, low-profile and light-weight type.



Applications

❖0.8 ~ 6 GHz wireless communication systems, including DECT/PACS/PHS/GSM/DCS phones, WLAN card, Bluetooth modules, etc.

Specifications

Part Number	Freq. Range (MHz)	Unbalanced Impedance (ohm)	Balanced Impedance (ohm)	Insertion Loss @ BW (dB)	VSWR @ BW	Phase Diff. (degree)	Amp. Diff. (dB)	Attenuation (dB)
FB2012-07N2R4D_	2400 ~ 2500	50	Conjugate match to BC series of CSR	3.5 max.	2.0 max.	180±10	1.5	45 min.@ 880~960MHz 30 min.@1710~1880 MHz 25 min.@1880~1990 MHz 40 min.@4800~5000MHz 30 min.@7200~7500MHz

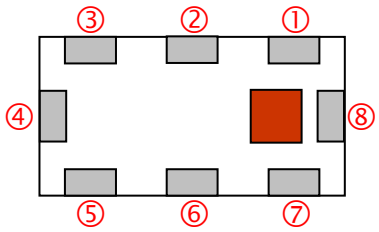
Q'ty/Reel (pcs) : 4,000
Operating Temperature Range : -40 ~ +85 °C
Storage Temperature Range : +5 ~ +35 °C, Humidity 45~75%RH
Storage Period : 12 months max.
Power Capacity : 1W max.
DC Feed Operating Voltage: : 3.5V max.

Part Number

FB	2012	-	07	N	2R4	D	□	□
①	②		③	④	⑤	⑥	⑦	⑧

① Type	FB : Band Pass Filter + Balun	② Dimensions (L × W)	2.0 × 1.2 mm
③ Balanced Impedance	07 : Conjugate match to CSR chipset	④ Material Code	N
⑤ Central Frequency	2R4 : 2400MHz	⑥ Specification Code	D
⑦ Packaging	T: Tape & Reel B: Bulk	⑧ Soldering	=lead-containing /LF=lead-free

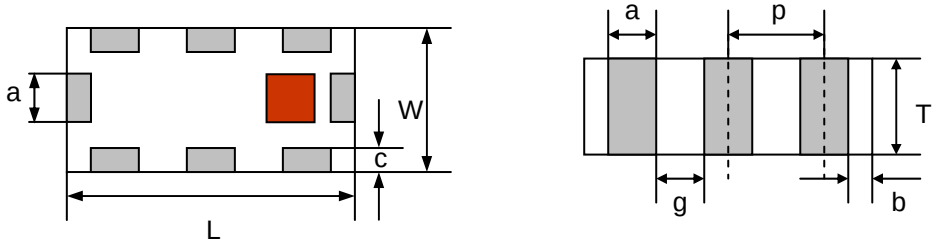
Terminal Configuration



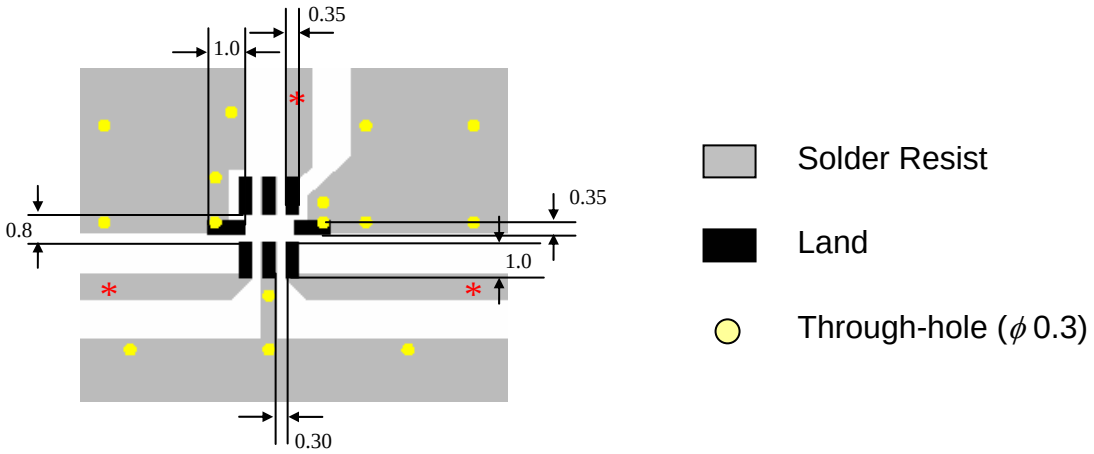
No.	Terminal Name	No.	Terminal Name
①	Unbalanced Port	⑤	Balanced Port
②	NC or DC Feed	⑥	GND
③	NC	⑦	Balanced Port
④	GND	⑧	GND

Dimensions

Unit : mm

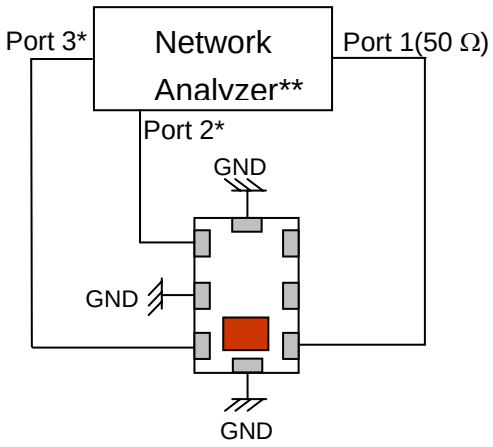


Mark	L	W	T	a	b	c	g	p
Dimensions	2.0 ± 0.2	1.25 ± 0.2	0.7 ± 0.1	0.3 ± 0.1	0.2 ± 0.1	0.3+0.1 /-0.2	0.35 ± 0.1	0.65 ± 0.05



* Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

Measuring Diagram



Port 1:Unbalanced Port

Ports 2 and 3: Balanced Port

IL=S_{ds21}

RL=S_{ss11}

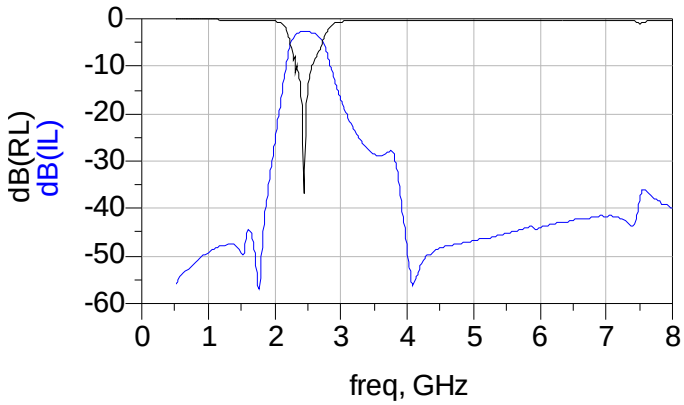
Amp_balance = dB(S(2,1)/S(3,1))

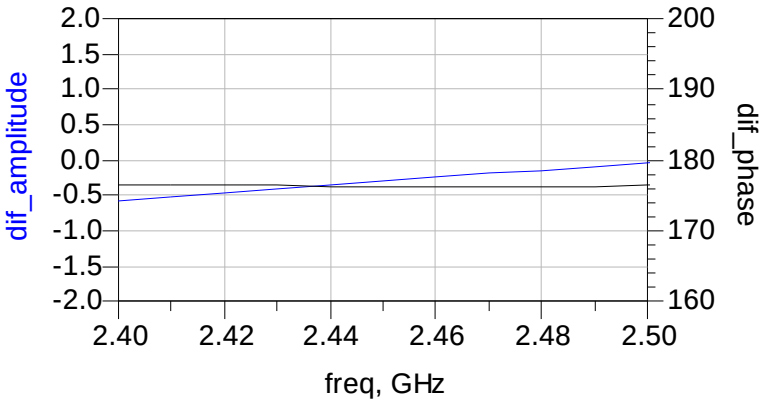
Phase_balance = Phase(S(2,1)/S(3,1))

*Impedance for ports 2 and 3
= Conjugate to Balanced Impedance/2

**E5071B from Agilent

Typical Electrical Characteristics (T=25°C)





Notes

❖The contents of this data sheet are subject to change without notice. Please confirm the specifications and delivery conditions when placing your order.

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