

P/N	ESLB-P540A	DATE.	'04- 8- 17	
DWN.	M.Uchida	DATA-No.	2MT43525	2

4.9-5.9GHz Band Chip Multilayer Band Pass Filter

ESLB-P540A-[]

BPF with Balun for W-LAN

1ST Sample DATA

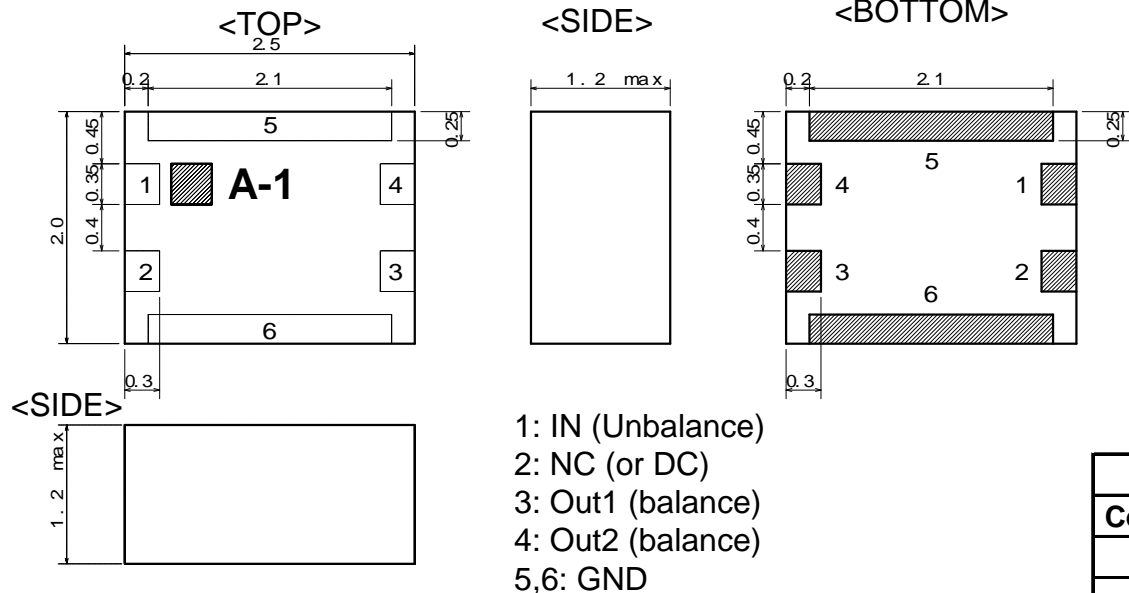
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Shape and Size

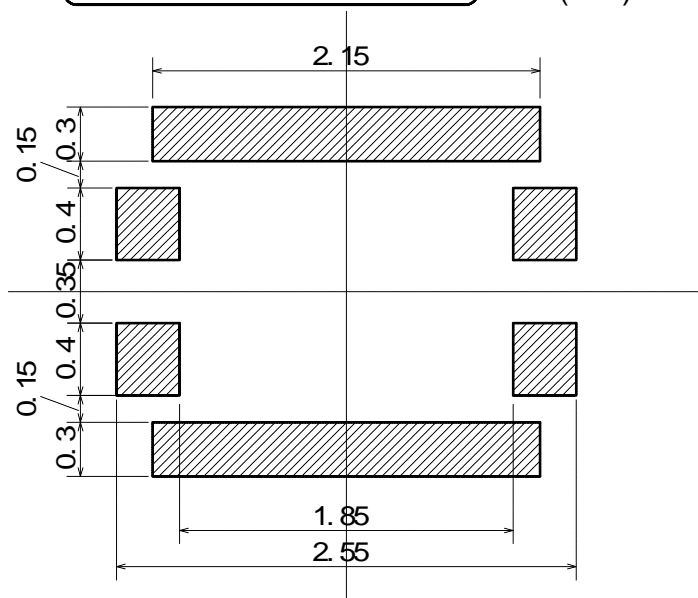
Unit (mm)



- 1: IN (Unbalance)
- 2: NC (or DC)
- 3: Out1 (balance)
- 4: Out2 (balance)
- 5,6: GND

Foot Pattern

Unit (mm)



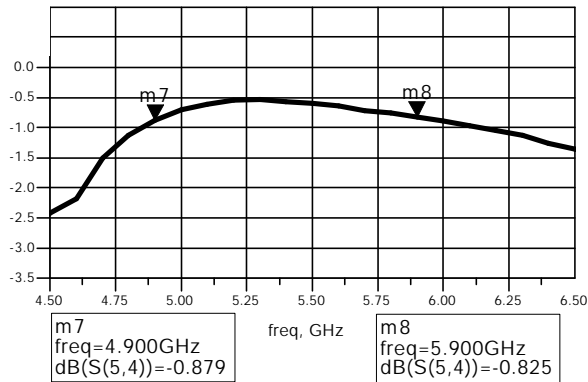
Specification

Parameter	Unit	
Center Frequency(f_0)	MHz	5400
Passband Width	MHz	$f_0 \pm 500$
Insertion Loss	dB	1.5 max
V.S.W.R. (Unbalance Port)	dB	2.2 Max.
Attenuation1 (at DC-2.5GHz)	dB	25 min
Attenuation2 (at 9.8-11.8GHz)	dB	20 min
Attenuation3 (at 14.7-17.7GHz)	dB	15 min
Phase balance	deg.	180 \pm 15
Amplitude balance	dB	1.5 max
Impedance ratio	Ohm	50:50 or 50:100
ESLB-P540A-1		50:50
ESLB-P540A-2		50:100

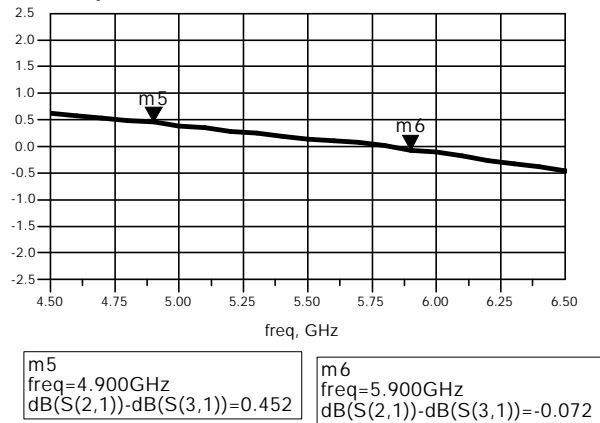
ESLB-P540A-1 1ST sample DATA

(Impedance ratio 50:50)

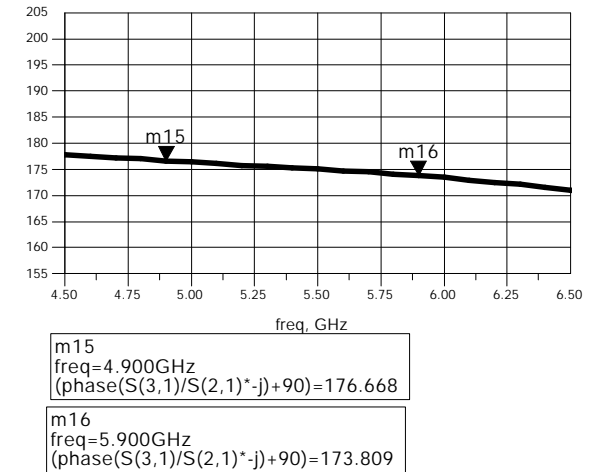
Ins.Loss



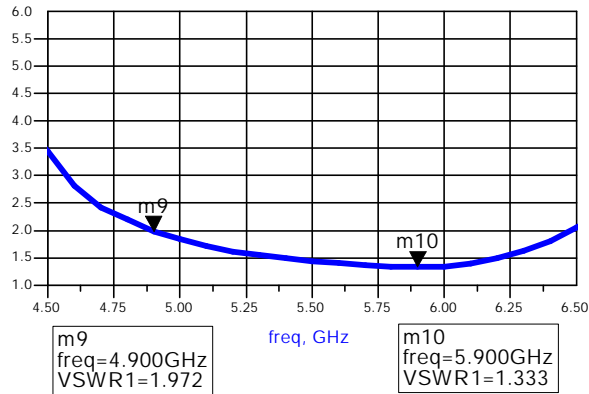
Amplitude Balance



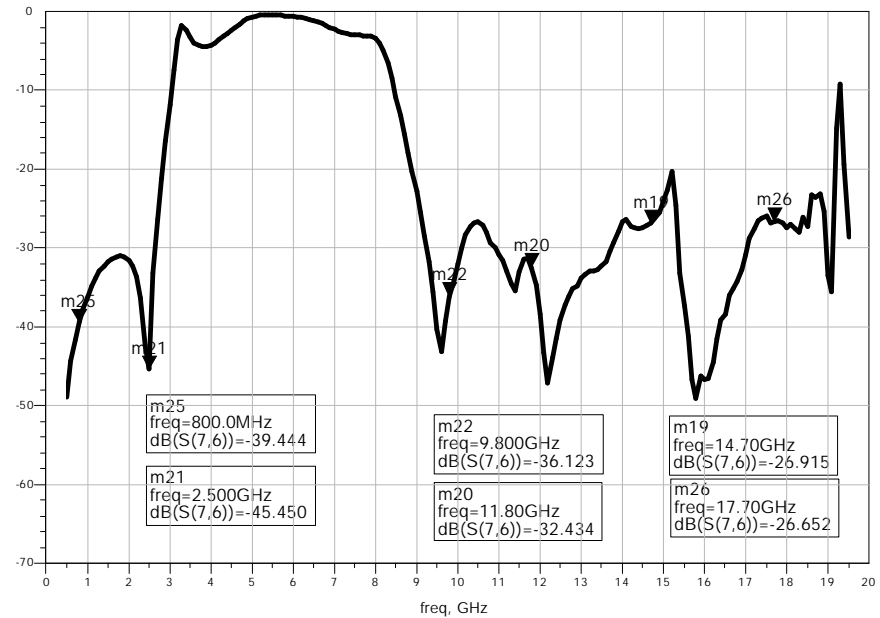
Phase Balance



V.S.W.R.



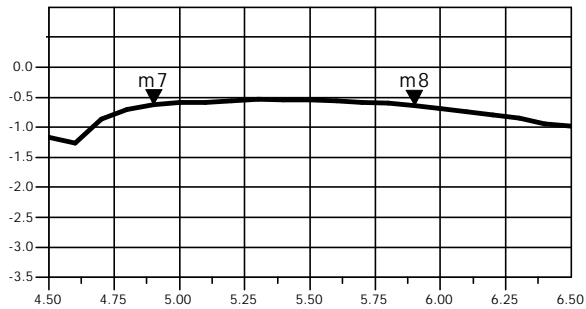
Attenuation



ESLB-P540A-2 1ST sample DATA

(Impedance ratio 50:100)

Ins.Loss

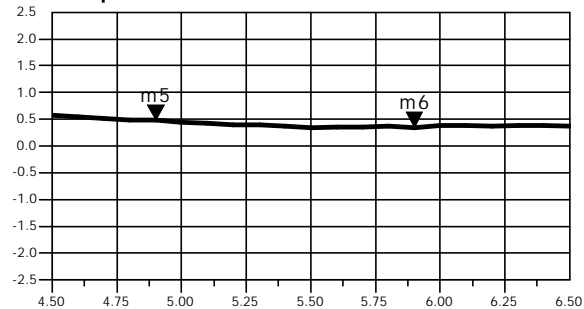


m7
freq=4.900GHz
dB(S(5,4))=-0.627

freq, GHz

m8
freq=5.900GHz
dB(S(5,4))=-0.640

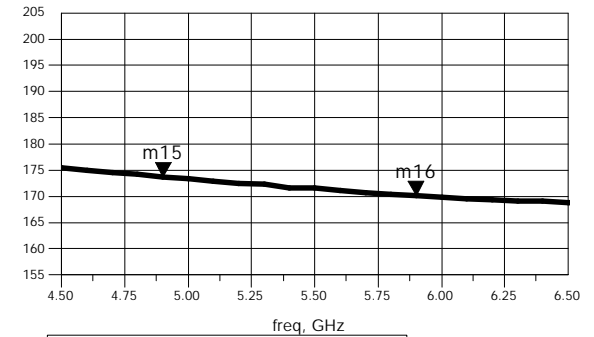
Amplitude Balance



m5
freq=4.900GHz
dB(S(2,1))-dB(S(3,1))=0.483

m6
freq=5.900GHz
dB(S(2,1))-dB(S(3,1))=0.346

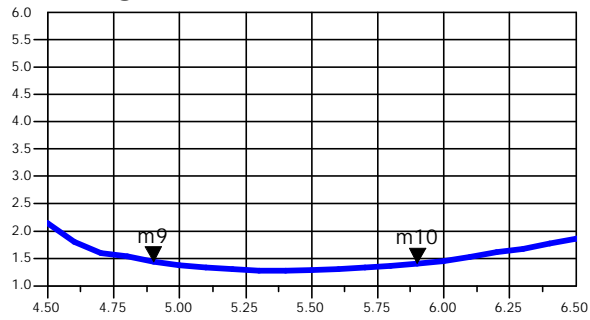
Phase Balance



m15
freq=4.900GHz
(phase(S(3,1)/S(2,1))-j)+90=173.665

m16
freq=5.900GHz
(phase(S(3,1)/S(2,1))-j)+90=170.127

V.S.W.R.

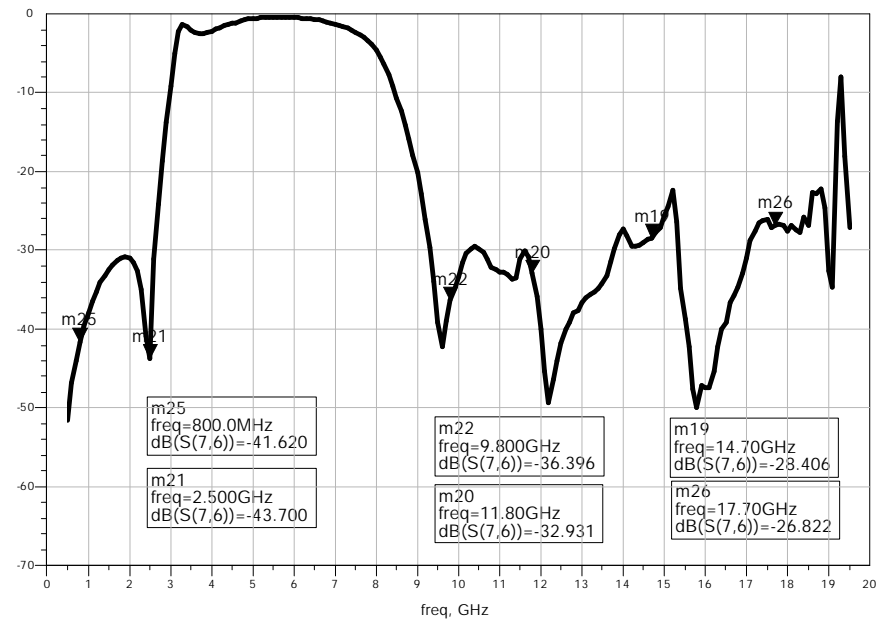


m9
freq=4.900GHz
VSWR1=1.439

freq, GHz

m10
freq=5.900GHz
VSWR1=1.410

Attenuation



m25
freq=800.0MHz
dB(S(7,6))=-41.620

m21
freq=2.500GHz
dB(S(7,6))=-43.700

m22
freq=9.800GHz
dB(S(7,6))=-36.396

m20
freq=11.80GHz
dB(S(7,6))=-32.931

m19
freq=14.70GHz
dB(S(7,6))=-28.406

m26
freq=17.70GHz
dB(S(7,6))=-26.822