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

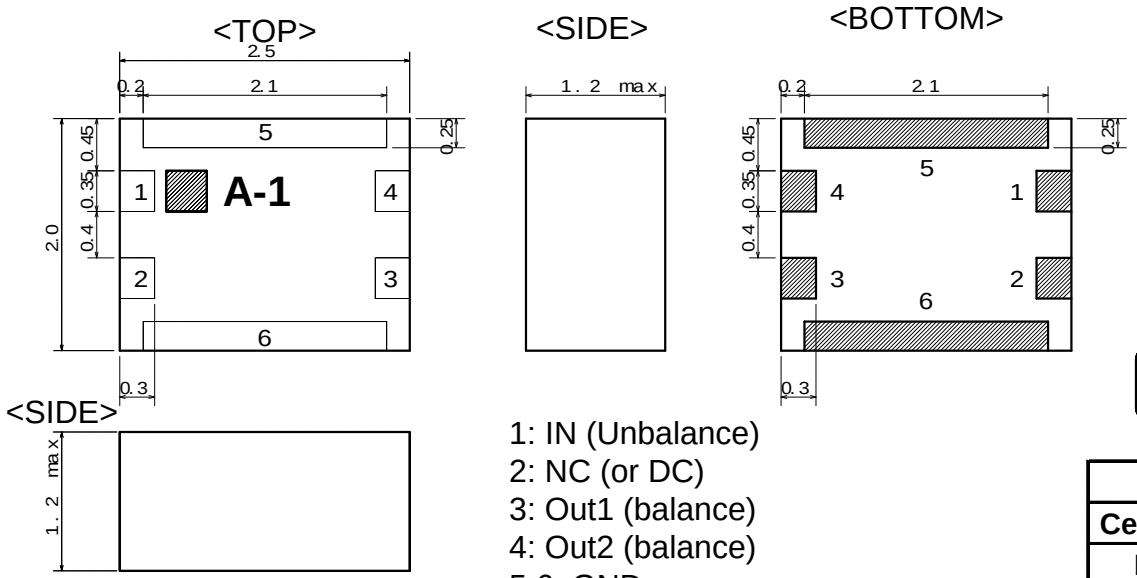
All the technical data and information contained herein are subject to change without notice.

Materials Magic
Hitachi Metals

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Shape and Size

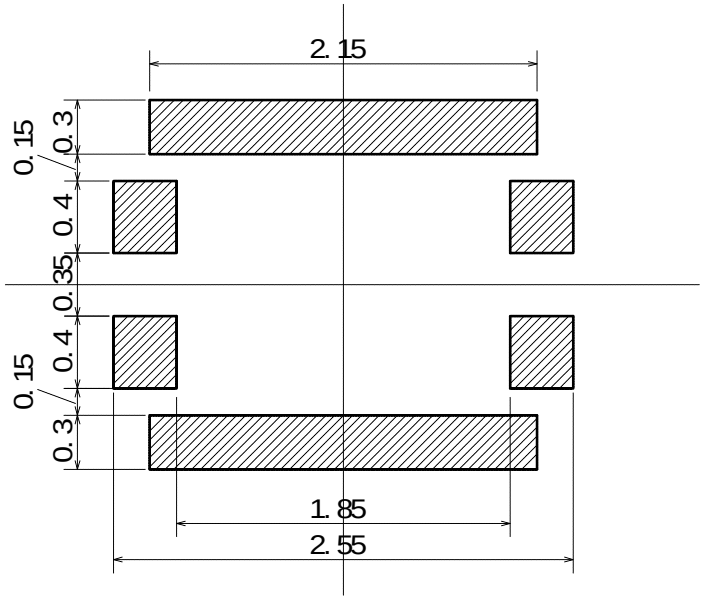
Unit (mm)



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

Foot Pattern

Unit (mm)



Specification

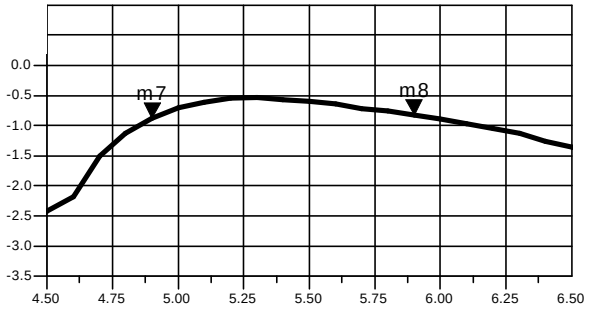
Parameter	Unit	
Center Frequency(fo)	MHz	5400
Passband Width	MHz	fo +/- 500
Insertion Loss	dB	1.5 max
V.S.W.R. (Unbalance Port)	dB	2.2 Max.
Attenuation1 (at DC-2.5GHz)	dB	25 min
Attenuation2 (at 9.8-11.8GHz)	dB	20 min
Attenuation3 (at 14.7-17.7GHz)	dB	15 min
Phase balance	deg.	180 +/- 15
Amplitude balance	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

Data-No.2MT43525 Rev.2

(Impedance ratio 50:50)

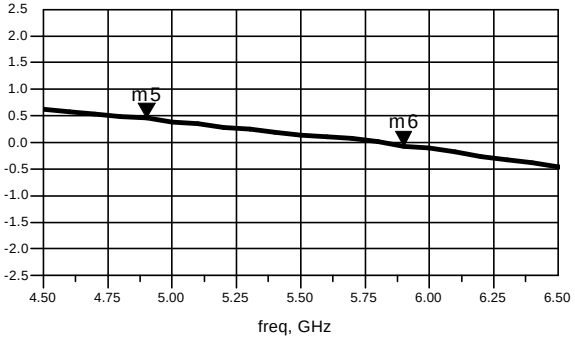
Ins.Loss



m7
freq=4.900GHz
dB(S(5,4))=-0.879

m8
freq=5.900GHz
dB(S(5,4))=-0.825

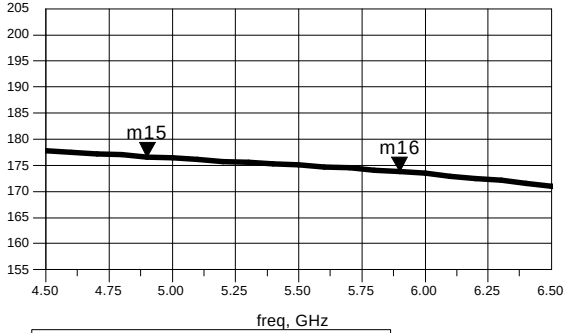
Amplitude Balance



m5
freq=4.900GHz
dB(S(2,1))-dB(S(3,1))=0.452

m6
freq=5.900GHz
dB(S(2,1))-dB(S(3,1))=-0.072

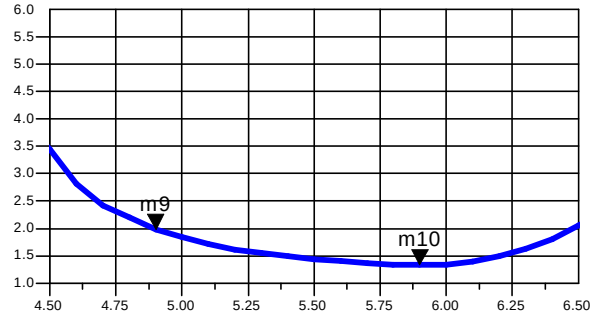
Phase Balance



m15
freq=4.900GHz
(phase(S(3,1)/S(2,1)*-j)+90)=176.668

m16
freq=5.900GHz
(phase(S(3,1)/S(2,1)*-j)+90)=173.809

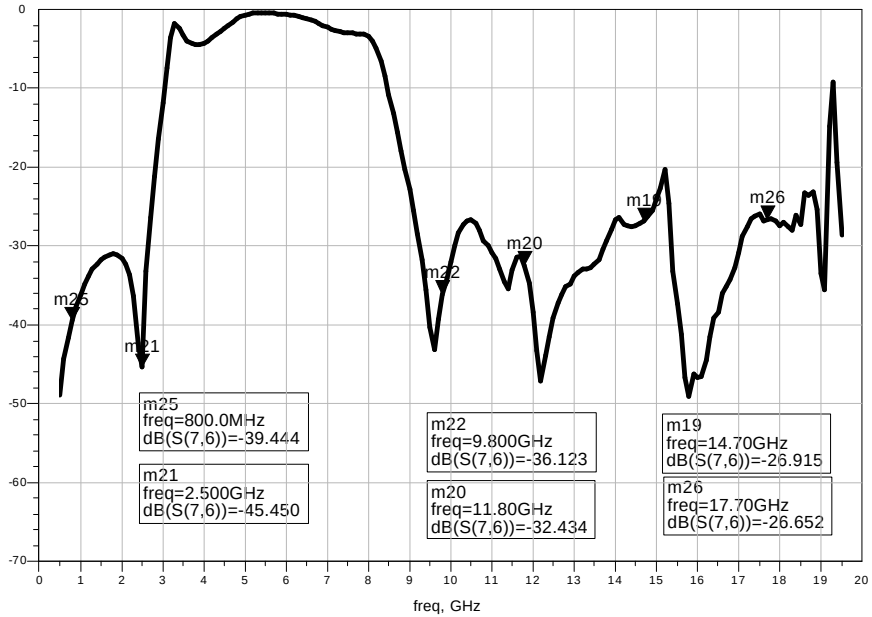
V.S.W.R.



m9
freq=4.900GHz
VSWR1=1.972

m10
freq=5.900GHz
VSWR1=1.333

Attenuation



m25
freq=800.0MHz
dB(S(7,6))=-39.444

m21
freq=2.500GHz
dB(S(7,6))=-45.450

m22
freq=9.800GHz
dB(S(7,6))=-36.123

m20
freq=11.80GHz
dB(S(7,6))=-32.434

m19
freq=14.70GHz
dB(S(7,6))=-26.915

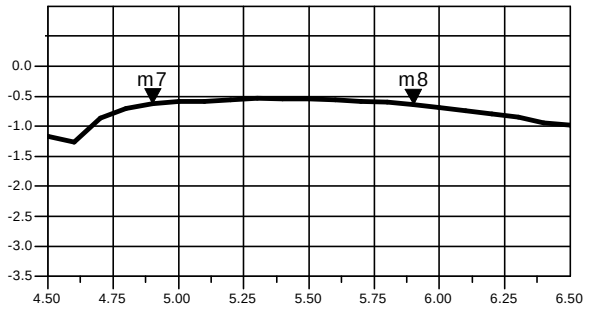
m26
freq=17.70GHz
dB(S(7,6))=-26.652

ESLB-P540A-2 1ST sample DATA

Data-No.2MT43525 Rev.2

(Impedance ratio 50:100)

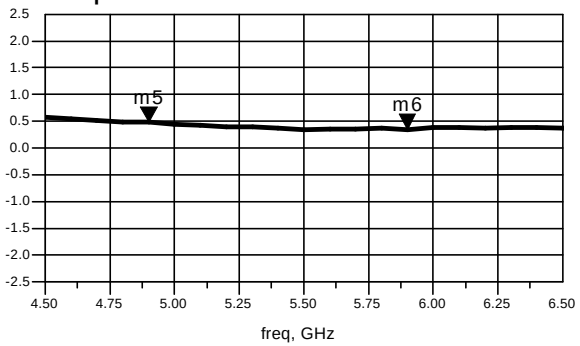
Ins.Loss



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

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

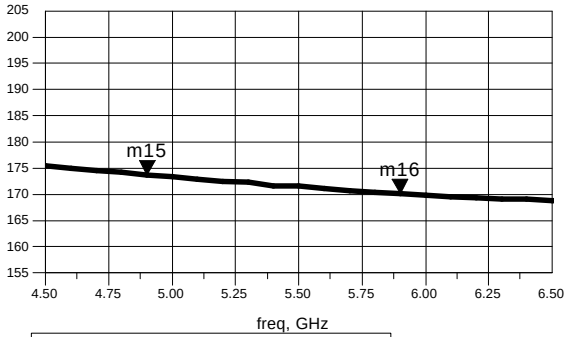
Amplitude Balance



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

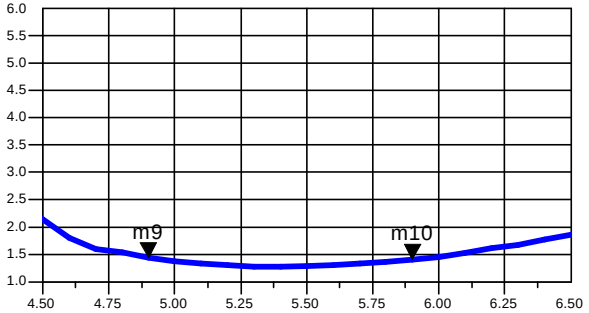
Phase Balance



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

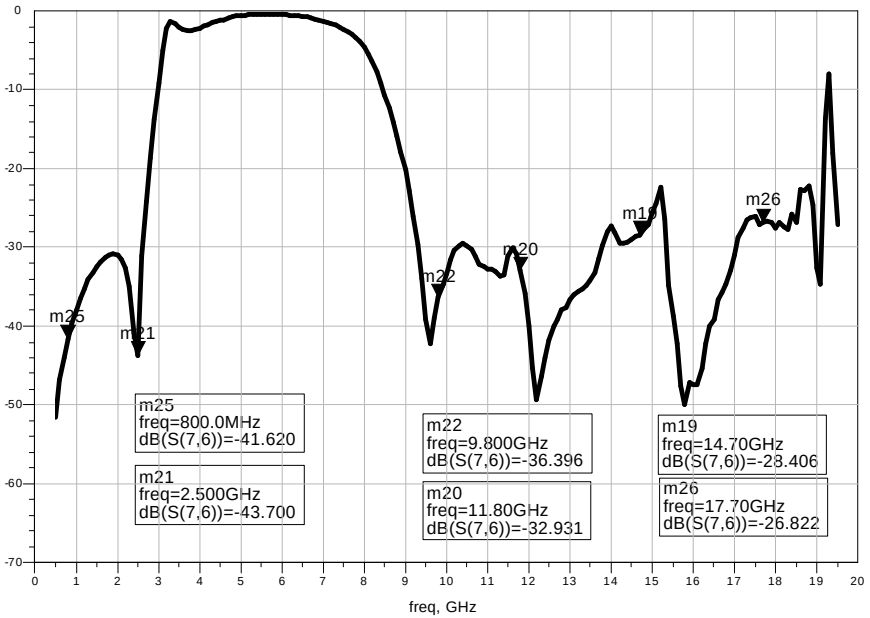
V.S.W.R.



m9
freq=4.900GHz
VSWR1=1.439

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))=-23.406

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