

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

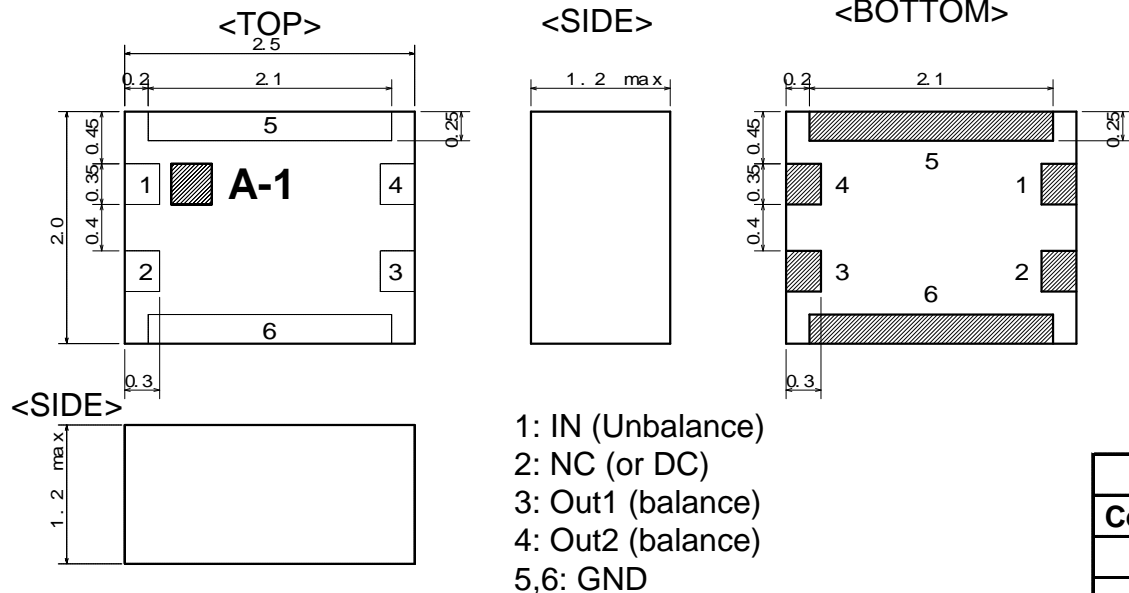
All the technical data and information contained herein are subject to change without notice.



CONFIDENTIAL
The contents of this document is the property of Hitachi Metals Ltd. and may not be communicated to any other party in any form without the prior written contents of Hitachi Metals Ltd..

Shape and Size

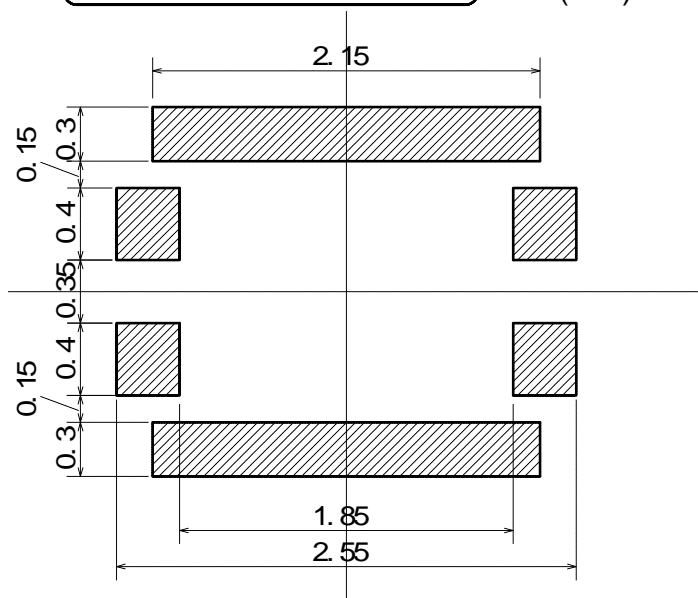
Unit (mm)



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

Foot Pattern

Unit (mm)



Specification

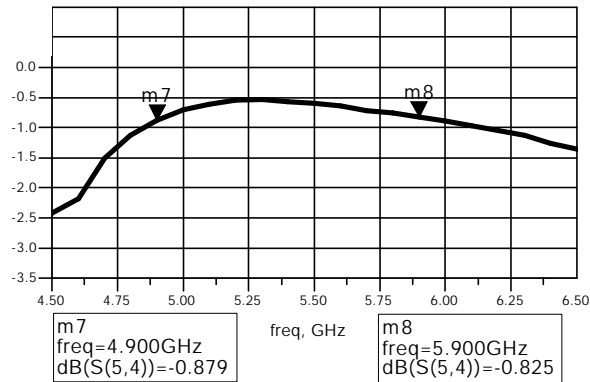
Parameter	Unit	
Center Frequency(f_0)	MHz	5400
Passband Width	MHz	$f_0 \pm 500$
Insertion Loss	dB	1.5 max
V.S.W.R. (Unbalance Port)	dB	2.2 Max.
Attenuation1 (at DC-2.5GHz)	dB	25 min
Attenuation2 (at 9.8-11.8GHz)	dB	20 min
Attenuation3 (at 14.7-17.7GHz)	dB	15 min
Phase balance	deg.	180 \pm 15
Amplitude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

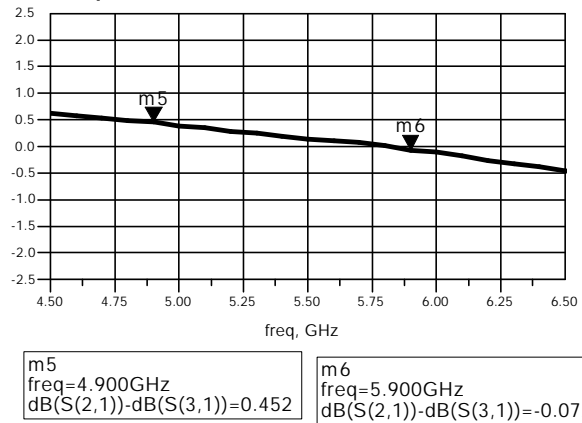
Data-No.2MT43525 Rev.2

(Impedance ratio 50:50)

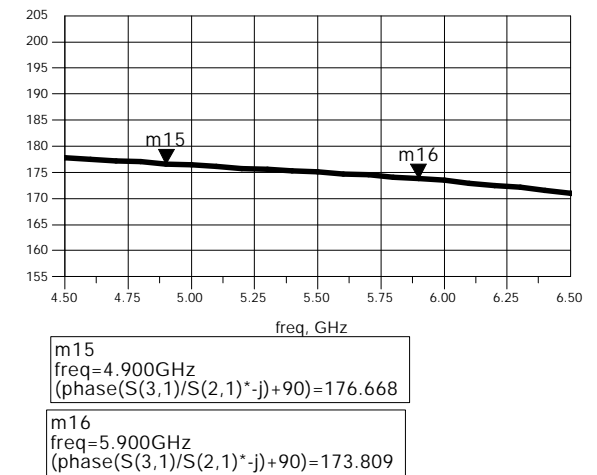
Ins.Loss



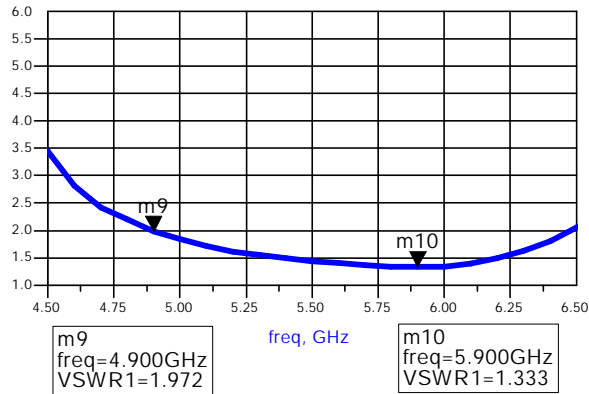
Amplitude Balance



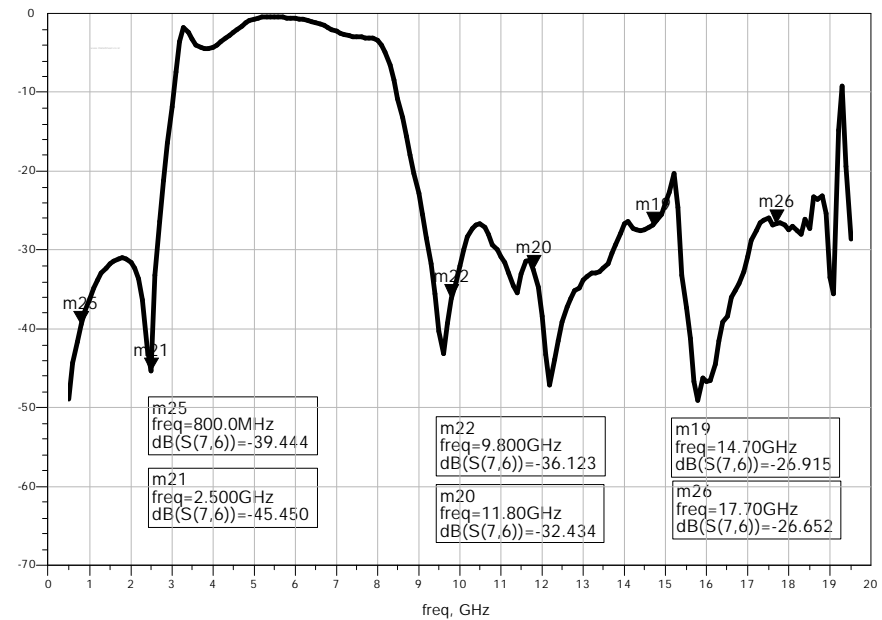
Phase Balance



V.S.W.R.



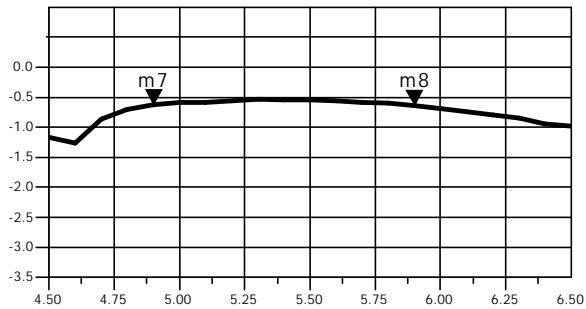
Attenuation



ESLB-P540A-2 1ST sample DATA

(Impedance ratio 50:100)

Ins.Loss

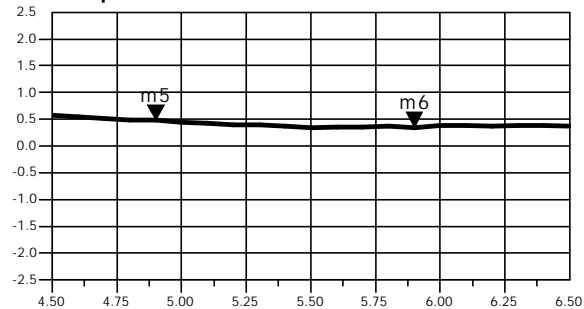


m7
freq=4.900GHz
dB(S(5,4))=-0.627

freq, GHz

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

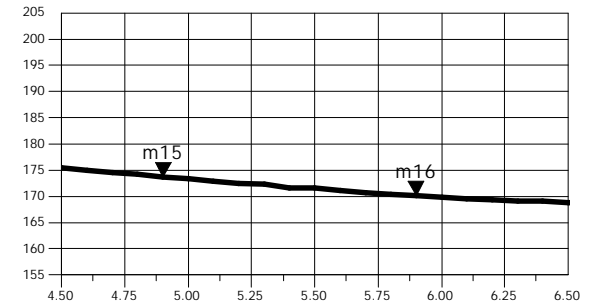
Amplitude Balance



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

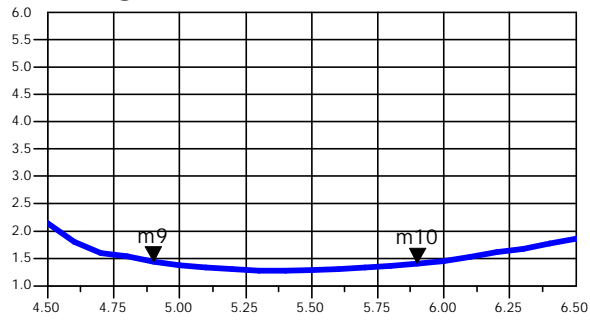
Phase Balance



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.

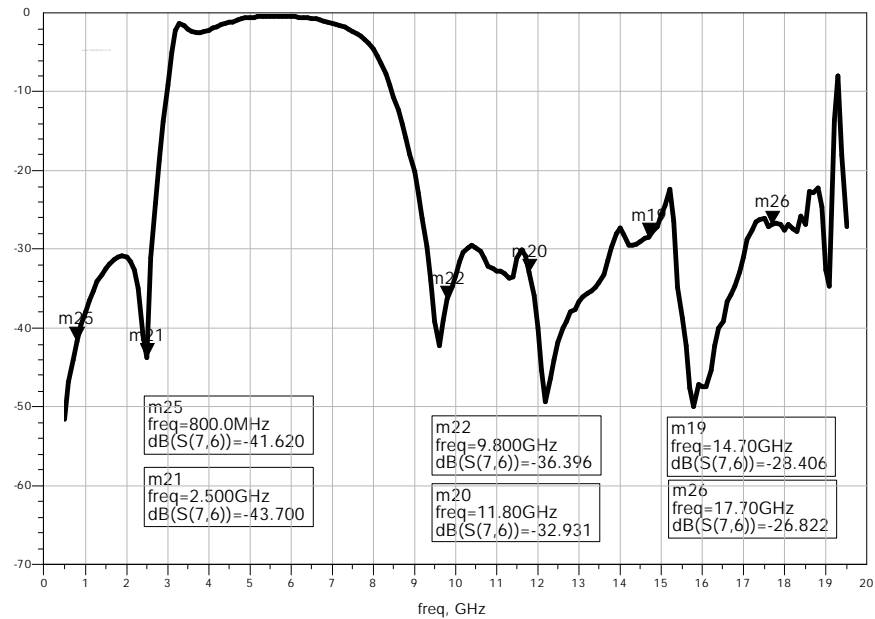


m9
freq=4.900GHz
VSWR1=1.439

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