

Product Information

Control No. : ARP-4170900-D 1

Issued on July 13, 2020

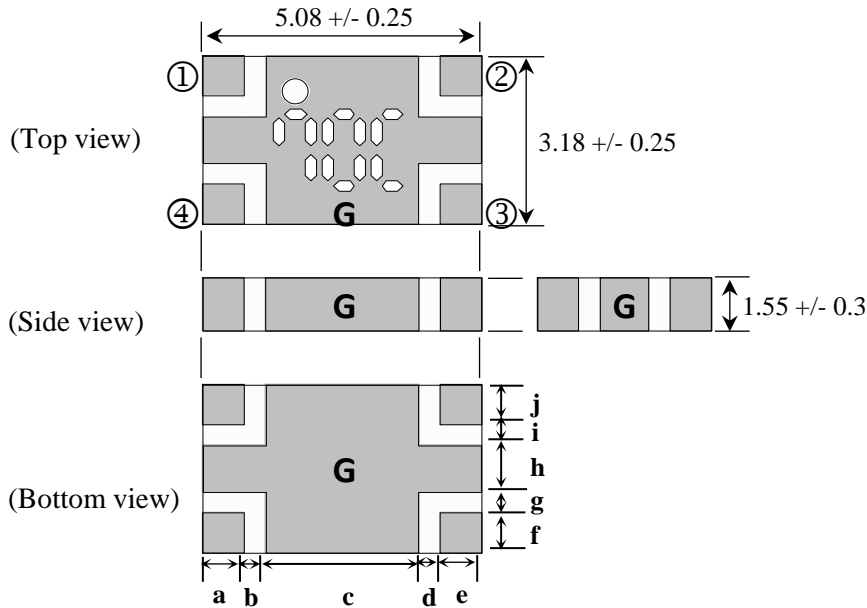
Application : 3dB 90deg Hybrid Coupler for 1350-1550MHz

1. Type No.

HMD1709A-HYB1500

RoHS Compliant Part

2. Dimension (Unit : mm)



Terminal	
①	IN
②	ISOLATION
③	OUT(90deg)
④	OUT(0deg)
G	GND

Terminal Dimensions	
a	0.76 +/- 0.20
b	0.38 +/- 0.20
c	2.80 +/- 0.20
d	0.38 +/- 0.20
e	0.76 +/- 0.20
f	0.77 +/- 0.20
g	0.38 +/- 0.20
h	0.89 +/- 0.20
i	0.38 +/- 0.20
j	0.77 +/- 0.20

3. Electrical characteristics

Parameter	Specification	Band1	Unit	Remark
Pass band frequency	Specification	1350-1550	MHz	
Nominal impedance	Specification	50	ohm	
Input port VSWR	Specification	1.15 Max.	dB	
	Typical	1.07		
Isolation	Specification	23 Min.	dB	
	Typical	29.7		
Insertion Loss at 25degC.	Specification	0.15 Max.	dB	
	Typical	0.12		
Amplitude balance	Specification	0.5 Max.	dB	
	Typical	0.15		
Phase balance	Specification	90 +/- 4	deg	
	Typical	90.6		
Group Delay Terminal 1-3	Specification	0.21 +/- 0.04	nsec	
	Typical	0.19 - 0.193		
Group Delay Terminal 1-4	Specification	0.21 +/- 0.04	nsec	
	Typical	0.186 - 0.191		

4. Note

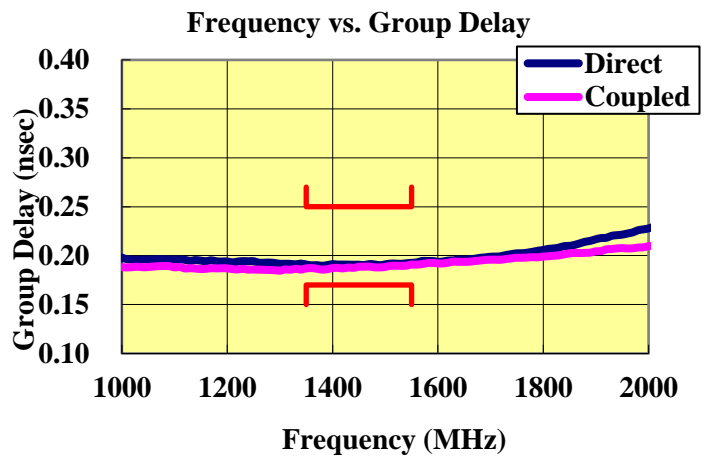
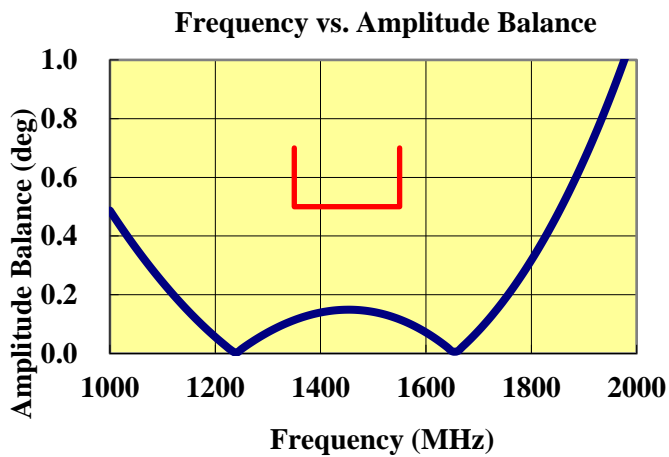
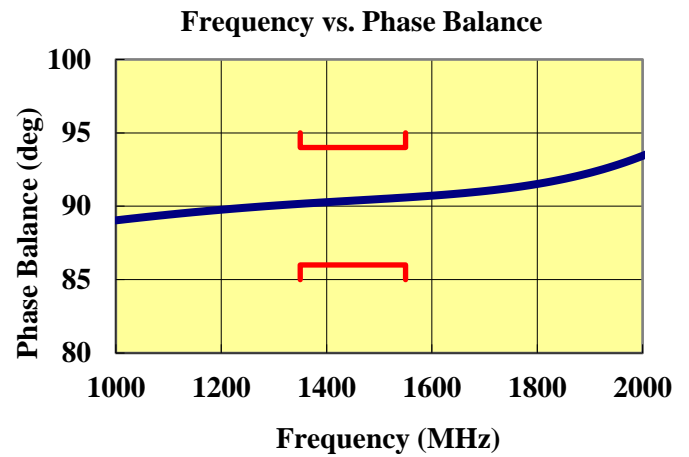
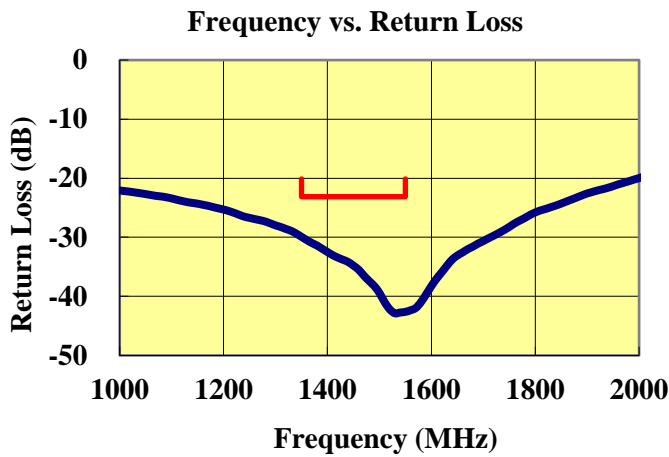
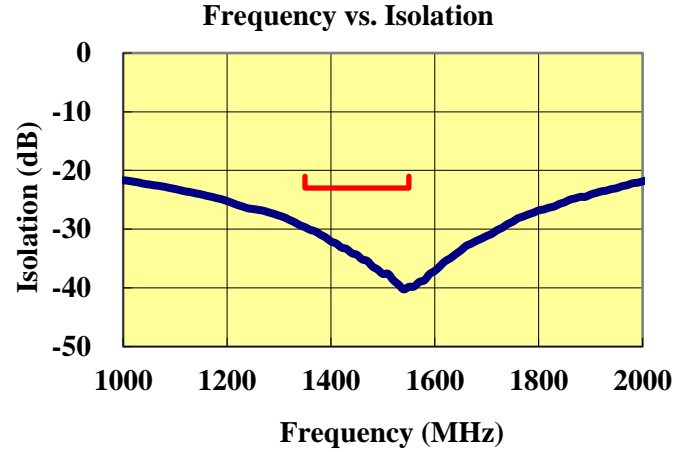
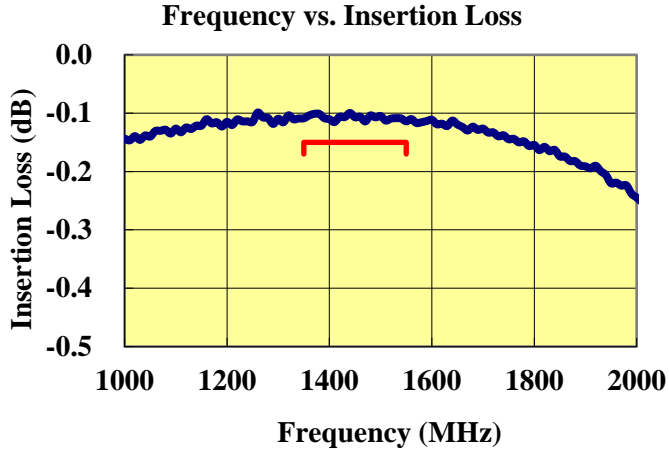
- | | |
|---------------------------------|--|
| 4.1 Operating Temperature Range | : -55 to +105 deg.C |
| 4.2 Storage Temperature Range | : -20 to +35 deg.C (In a Taping Package) |
| 4.3 Max Input Power | : 25W Avg/CW |
| 4.4 Standard Reel Quantity | : 1,000 pcs (per reel, per bag) |

Approved by	Confirmed by	Raised by
Y. Imai	T. Hasegawa	M. Aiba

SOSHIN ELECTRIC CO., LTD

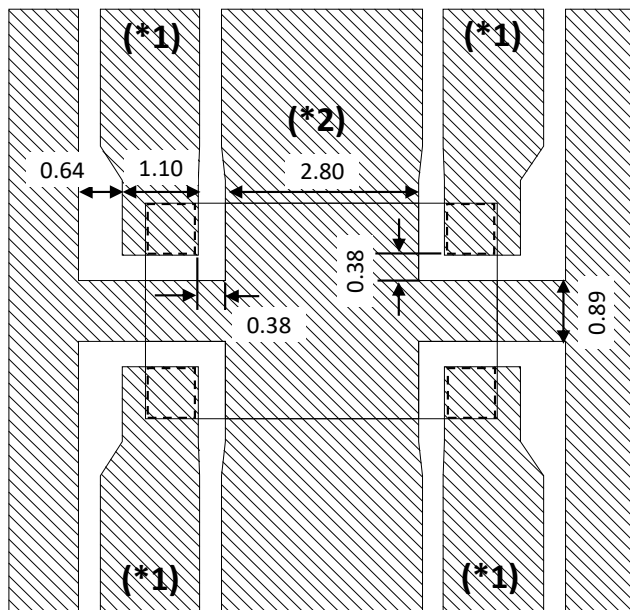
5.Representative characteristics

Measured data

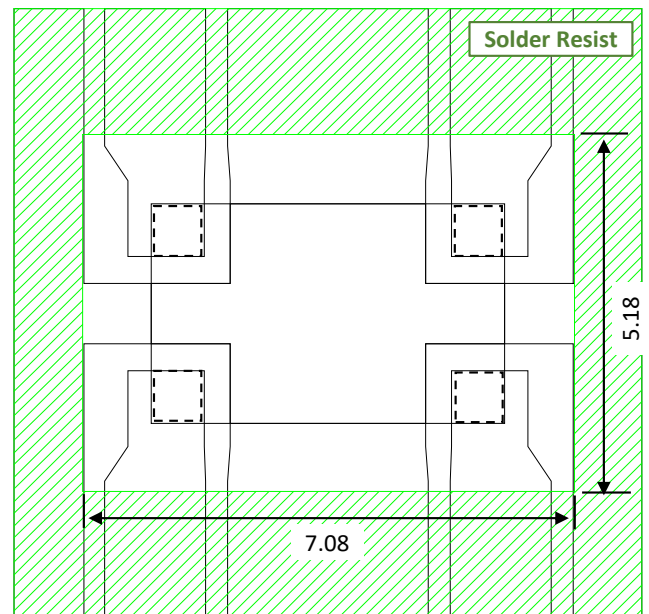


6.Recommended Land Pattern (Unit:mm)

*Land Pattern



*Resist Pattern



*1 50 ohm impedance Line

*2 Ground Plane