

Tentative Specification

(Under development)

Control No. : ARP-4170400-D 1

Issued on January 12, 2017

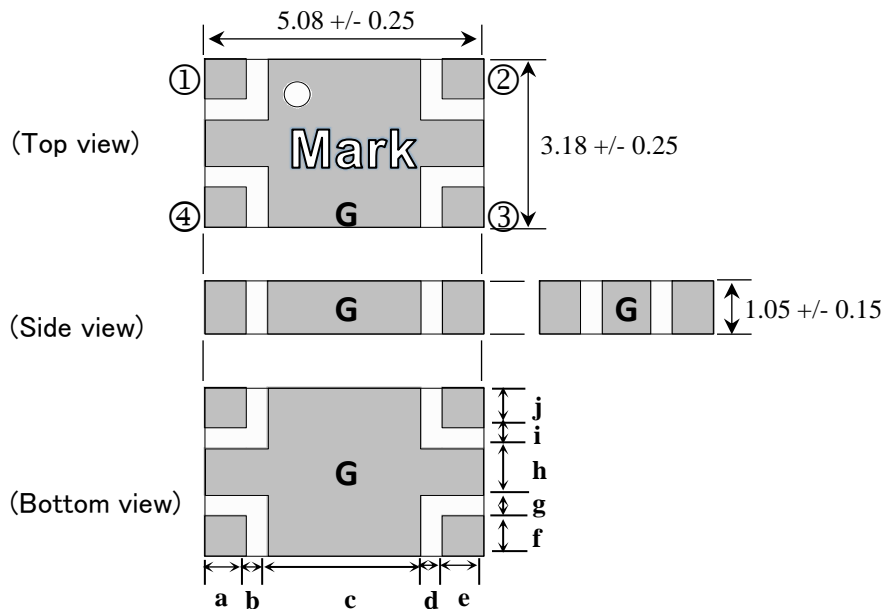
Application : 20dB Directional Coupler 1400-2700MHz

1. Type No.

HMD1704A-20M2000

RoHS Compliant Parts

2. Dimension (Unit : mm)



Terminal	
①	Input
②	Direct
③	Isolated
④	Coupled
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		Band1	Band2	Band3	Band4	Band5	Unit
Pass band frequency	Specification	1400-2700	1700-2200	1805-1880	1930-1990	2110-2170	MHz
Nominal impedance	Specification	50	50	50	50	50	ohm
Mean Coupling	Specification	20.0 ± 1.5	20.0 ± 1.0	19.5 ± 0.5	19.5 ± 0.5	19.5 ± 0.5	dB
	Typical	20.43	19.97	19.94	19.81	19.78	
Insertion Loss	Specification	0.10 Max.	0.05 Max.	0.05 Max.	0.05 Max.	0.05 Max.	dB
	Typical	0.05	0.04	0.03	0.03	0.04	
Input port V.S.W.R.	Specification	1.22 Max.	1.15 Max.	1.12 Max.	1.12 Max.	1.15 Max.	-
	Typical	1.10	1.06	1.06	1.05	1.06	
Directivity	Specification	20 Min.	23 Min.	25 Min.	25 Min.	25 Min.	dB
	Typical	26.90	28.70	30.16	31.64	33.92	
Group Delay Terminal 1-2	Specification	0.05 ± 0.015	0.05 ± 0.015	0.05 ± 0.015	0.05 ± 0.015	0.05 ± 0.015	nsec
	Typical	0.049-0.056	0.049-0.053	0.049-0.051	0.049-0.051	0.051-0.053	
Group Delay Terminal 1-4	Specification	0.11 ± 0.03	0.11 ± 0.03	0.11 ± 0.03	0.11 ± 0.03	0.11 ± 0.03	nsec
	Typical	0.112-0.122	0.112-0.116	0.113-0.115	0.115-0.116	0.115-0.116	

4. Note

- 4.1 Operating Temperature Range : -55 to +105 deg.C
- 4.2 Storage Temperature Range : -55 to +105 deg.C (goods alone)
: -20 to +35 deg.C (In a Taping Package)
- 4.3 Power Capacity : 100W max.
- 4.4 Minimum Ordering Quantity : 1,000 pcs (per reel, per bag)

Approved by	Confirmed by	Raised by
Y. Mizutani	A. Mizuma	H. Isono

SOSHIN ELECTRIC CO., LTD

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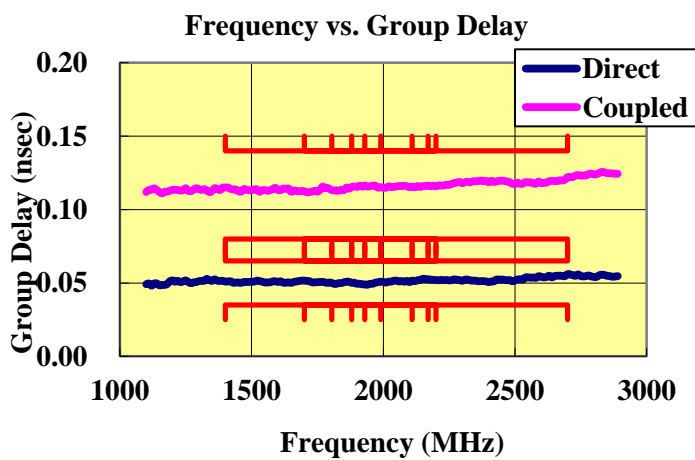
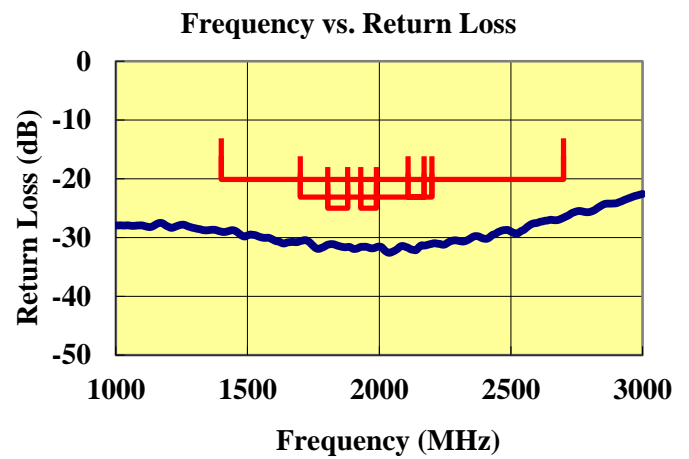
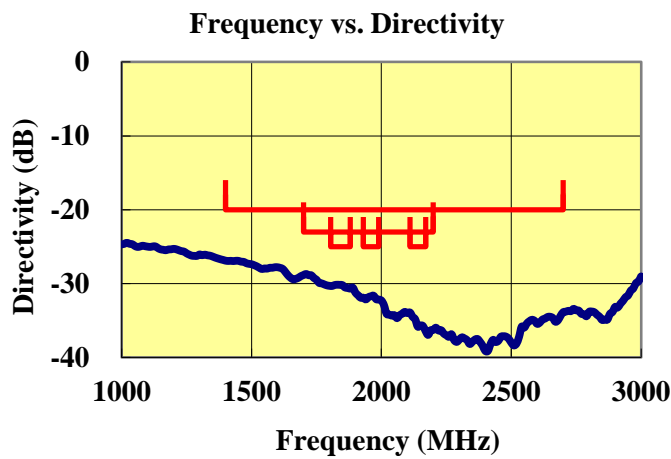
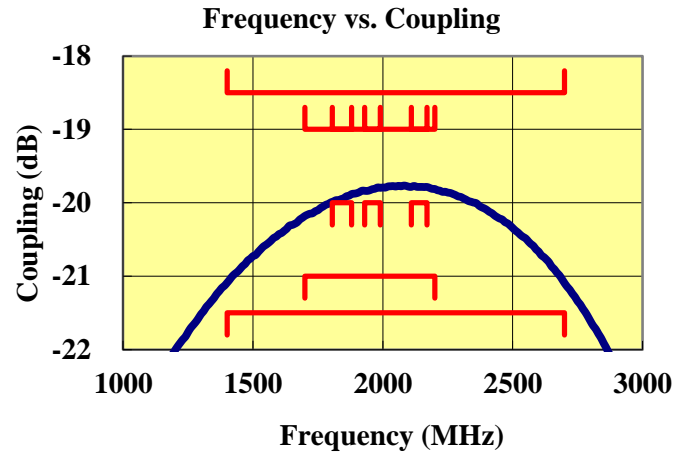
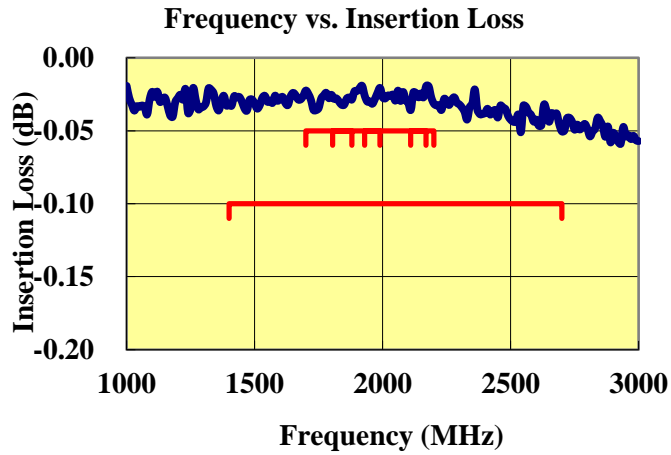
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5.Representative characteristics

Measured



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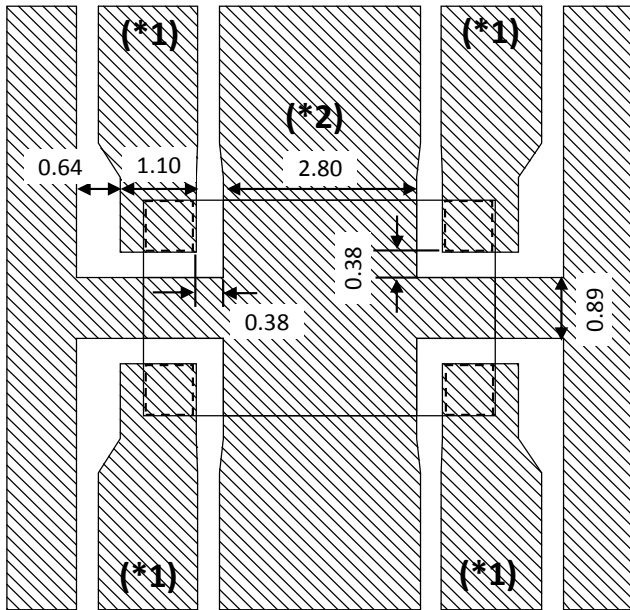
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Control No. : ARP-4170400-D3

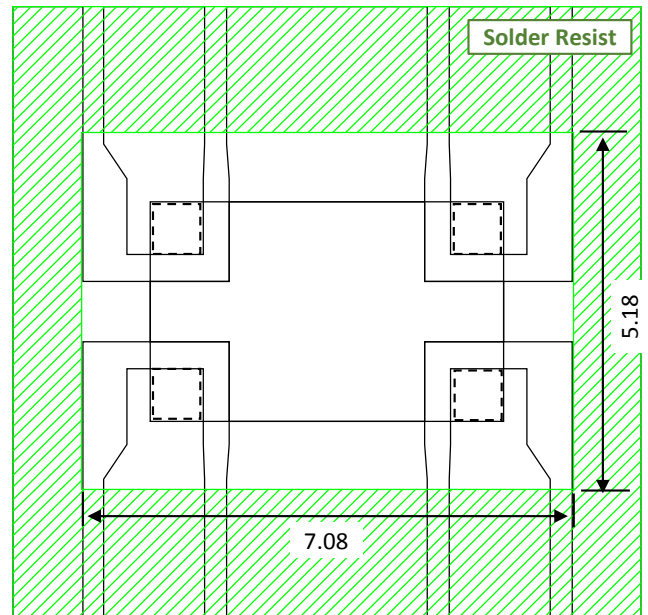
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6.Recommended Land Pattern (Unit:mm)

*Land Pattern



*Resist Pattern



*1 50 ohm impedance Line

*2 Ground Plane