

Tentative Specification

(Under development)

Control No. : ARP-4671200-J 1

Issued on July 13, 2020

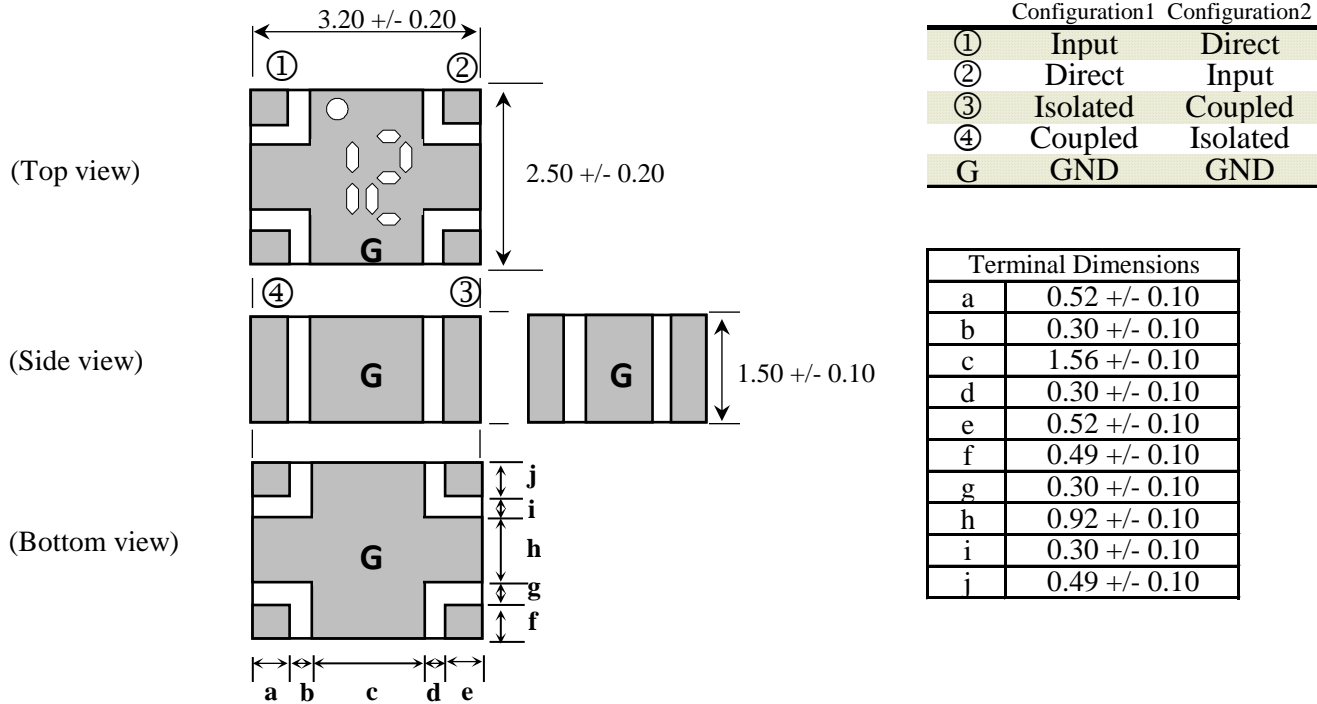
Application : 30dB Directional Coupler for 3200-4700MHz

1. Type No.

HMD6712D-30M3500

RoHS Compliant Part

2. Dimension (Unit : mm)



3. Electrical characteristics

| Parameter | | Band1 | Band2 | Band3 | Band4 | Unit | Remark |
|------------------------------|---------------|---------------|---------------|---------------|---------------|------|-----------------------|
| Pass band frequency | Specification | 3200-4000 | 3400-3600 | 3600-3800 | 4000-4700 | MHz | |
| Nominal impedance | Specification | 50 | 50 | 50 | 50 | ohm | |
| Mean Coupling | Specification | 30.0 +/- 1.5 | 30.0 +/- 1.5 | 30.0 +/- 1.5 | 30.0 +/- 4 | dB | Cpl(Average) |
| | Typical | 29.86 | 29.80 | 29.81 | 30.64 | | |
| Insertion Loss (at 25deg C.) | Specification | 0.075 Max. | 0.075 Max. | 0.075 Max. | 0.120 Max. | dB | |
| | Typical | 0.055 | 0.055 | 0.048 | 0.074 | | |
| Input port V.S.W.R. | Specification | 1.22 Max. | 1.20 Max. | 1.20 Max. | 1.22 Max. | - | |
| | Typical | 1.07 | 1.02 | 1.05 | 1.09 | | |
| Directivity | Specification | 18 Min. | 20 Min. | 20 Min. | 15 Min. | dB | |
| | Typical | 23.18 | 23.49 | 24.70 | 20.06 | | |
| Frequency Sensitivity | Specification | 0.50 Max. | 0.20 Max. | 0.20 Max. | 1.50 Max. | dB | Cpl(Max)-Cpl(Average) |
| | Typical | 0.10 | 0.04 | 0.03 | 0.70 | | |
| Group Delay Terminal 1-2 | Specification | 0.03 +/- 0.02 | 0.03 +/- 0.02 | 0.03 +/- 0.02 | 0.03 +/- 0.02 | nsec | |
| | Typical | 0.032-0.034 | 0.032-0.033 | 0.032-0.034 | 0.033-0.035 | | |
| Group Delay Terminal 1-4 | Specification | 0.06 +/- 0.02 | 0.06 +/- 0.02 | 0.06 +/- 0.02 | 0.07 +/- 0.05 | nsec | |
| | Typical | 0.053-0.071 | 0.054-0.067 | 0.053-0.067 | 0.049-0.066 | | |

4. Note

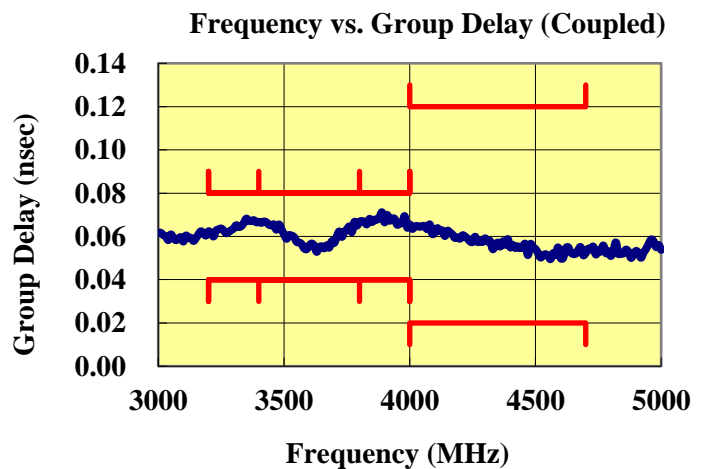
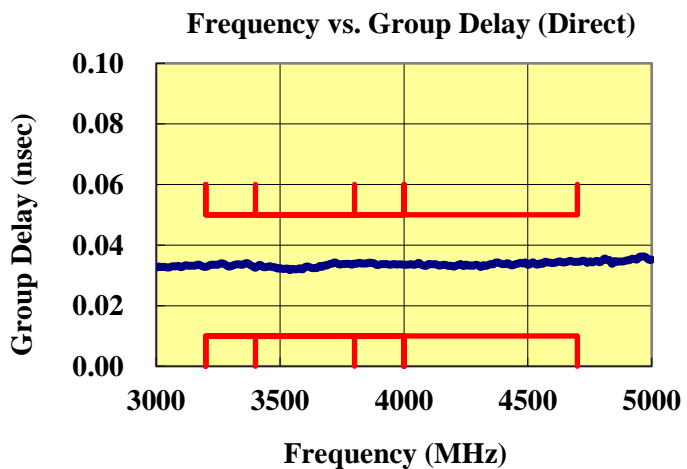
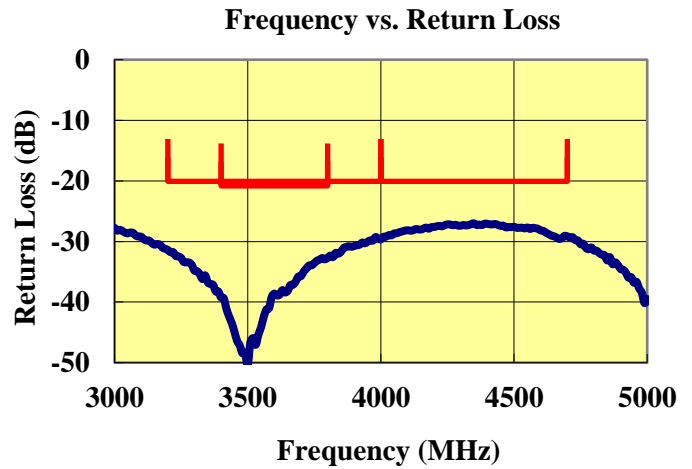
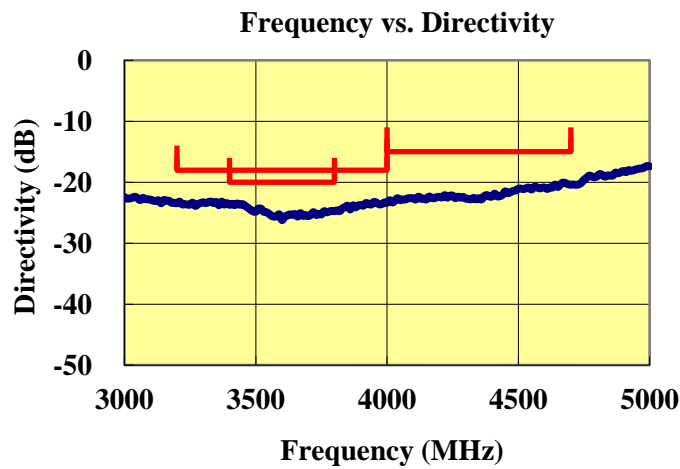
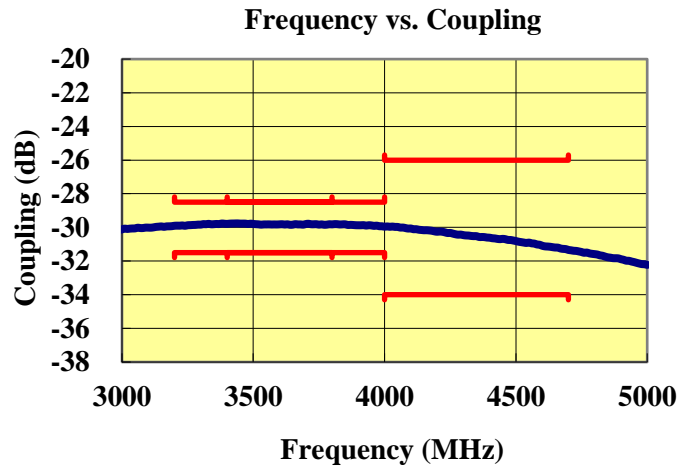
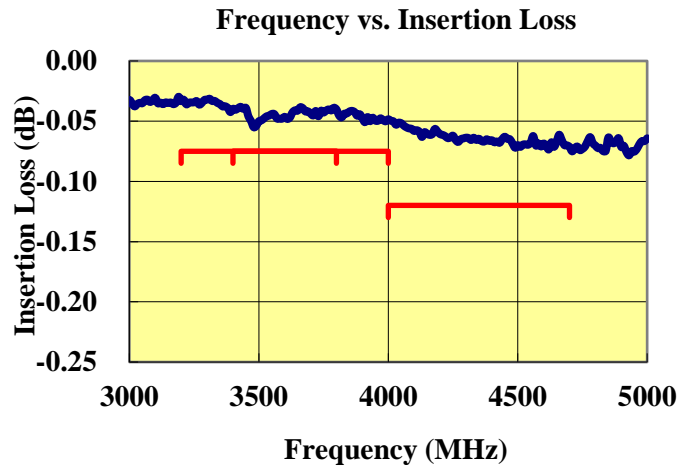
- | | |
|---------------------------------|---|
| 4.1 Operating Temperature Range | : -55 to +105 deg C. |
| 4.2 Storage Temperature Range | : -20 to +35 deg C. (In a Taping Package) |
| 4.3 Max Input Power | : 80W Avg/CW |
| 4.4 Standard Reel Quantity | : 2,000 pcs (per reel, per bag) |

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

SOSHIN ELECTRIC CO., LTD

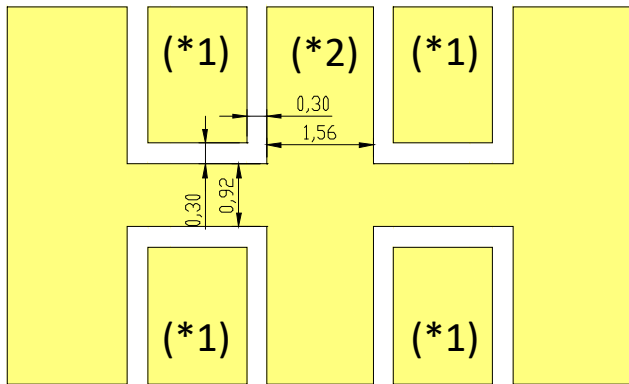
5.Representative characteristics

Measured data

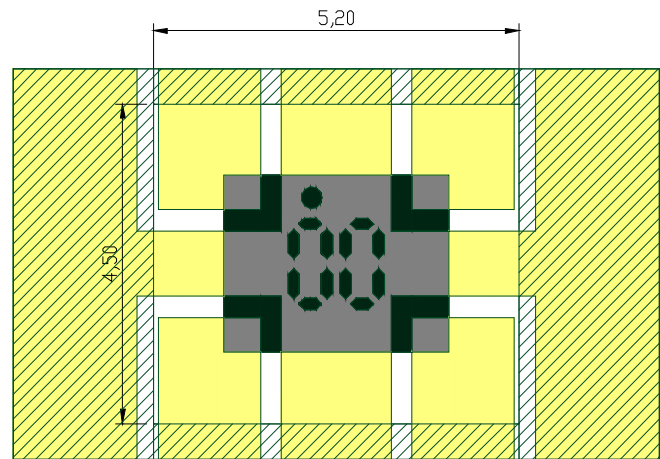


6.Recommended Land Pattern (Unit:mm)

***Land Pattern**



***Resist Pattern**



*1 50 ohm impedance Line

*2 Ground Plane