

Product Information

Control No. : ARP-481700-M1

Issued on December 13, 2019

Application : Diplexer for Wifi (2.4GHz / 5GHz)

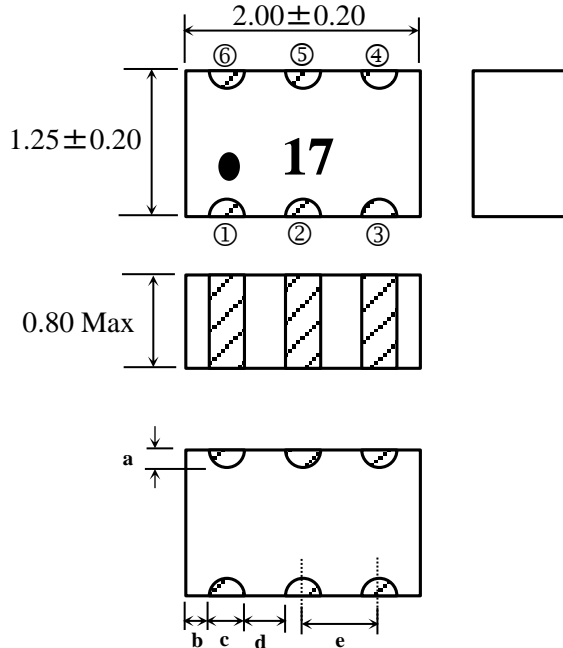
1. Type No.

HMD817J-T

RoHS Compliant Part

2. Dimension (Unit : mm)

AEC-Q200 Compliant Part



Terminal	
①	5G-Input
②	GND
③	2.4G-Input
④	GND
⑤	Common
⑥	GND

Terminal Dimensions	
a	0.15 Typ.
b	0.20 Typ.
c	0.30±0.10
d	0.35±0.10
e	0.65±0.10

3. Electrical characteristics

(3)-1 Common Port (⑤) - 5G-Input Port (①)

Parameter	Specification	Typical	Unit	Remark
fc (Center frequency)	5375	-	MHz	
Pass band frequency	4900-5850	-	MHz	
Nominal impedance	50	-	ohm	
Insertion Loss at 25degC.	1.2 Max.	0.88	dB	
Insertion Loss at -40 to +125degC.	1.6 Max.	-	dB	
Common port VSWR in BW	2.0 Max.	1.43	-	
Ripple	0.5 Max.	0.21	dB	
Attenuation	at 824 - 2500	25 Min	30.14	dB

(3)-2 Common Port (⑤) - 2.4G-Input Port (③)

Parameter	Specification	Typical	Unit	Remark
fc (Center frequency)	2450	-	MHz	
Pass band frequency	2400-2500	-	MHz	
Nominal impedance	50	-	ohm	
Insertion Loss at 25degC.	2.2 Max.	1.90	dB	
Insertion Loss at -40 to +125degC.	2.7 Max.	-	dB	
Common port VSWR in BW	2.0 Max.	1.39	-	
Ripple	1.0 Max.	0.50	dB	
Attenuation	at 824 - 2170	25 Min	32.71	dB
(MHz)	at 4800 - 5000	32 Min	36.11	dB
	at 7200 - 7500	20 Min	37.42	dB

4. Note

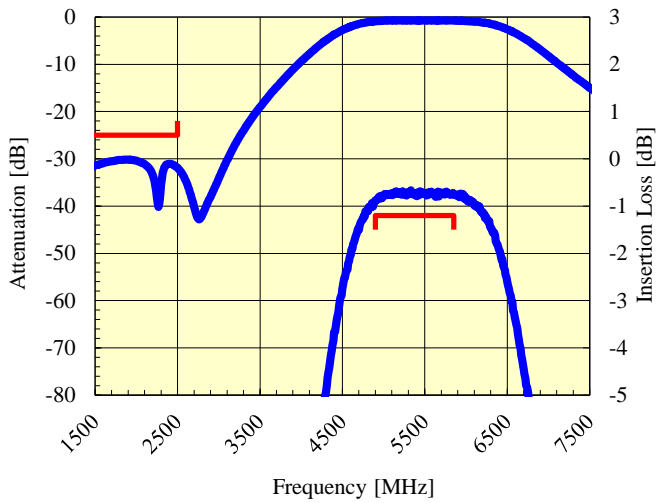
- 4.1 Operating Temperature Range : -40 to +125 deg.C
 4.2 Storage Temperature Range before soldering in taping package : -20 to +35 deg.C
 4.3 Minimum Ordering Quantity : 2,000 pcs (per reel, per bag)

Approved by	Confirmed by	Raised by
Y. Mizutani	Y. Imai	S. Suzuki

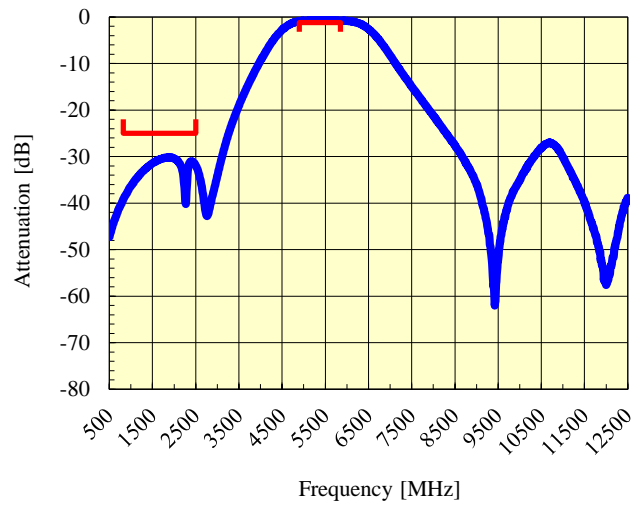
SOSHIN ELECTRIC CO., LTD

5. Representative characteristics

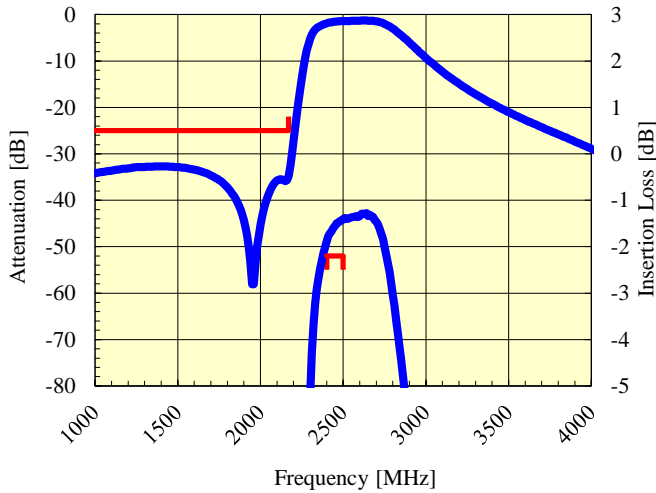
Pass Band Frequency Response (5GHz Port)



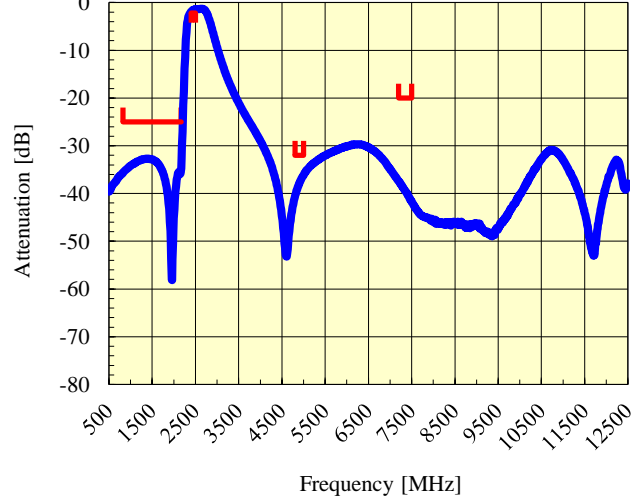
Broad Band Frequency Response (5GHz Port)



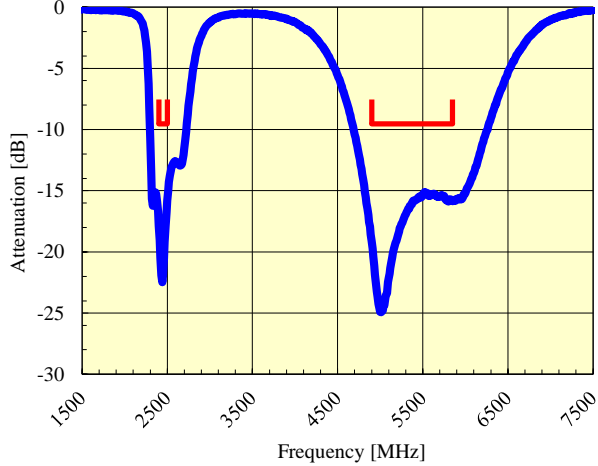
Pass Band Frequency Response (2.4GHz Port)



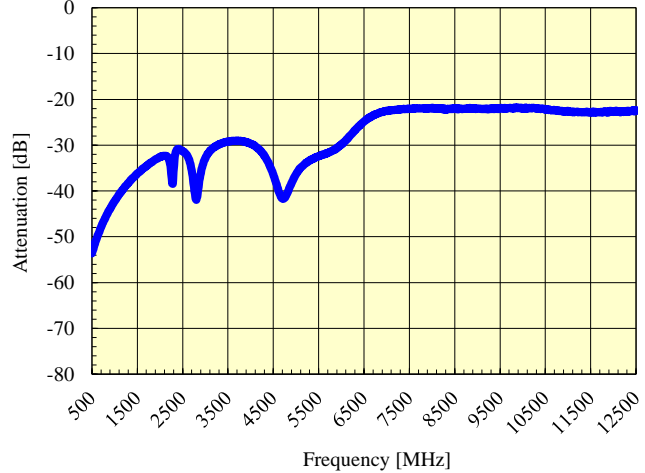
Broad Band Frequency Response (2.4GHz Port)



Pass Band Frequency Response (Common Port)



Broad Band Frequency Response (Isolation)



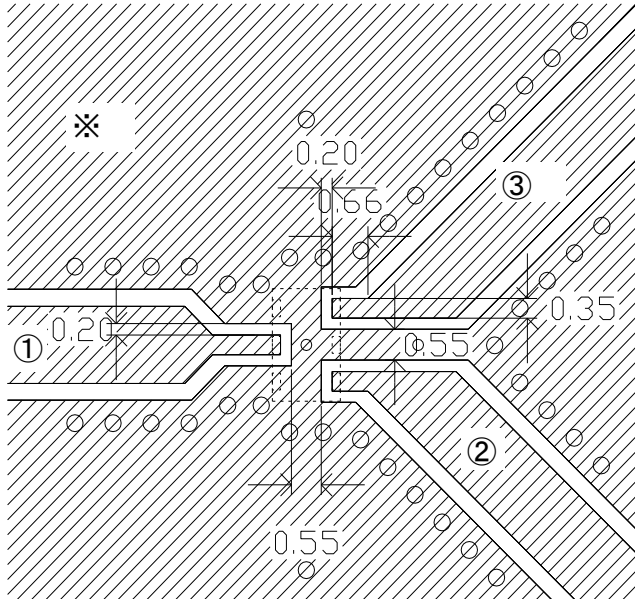
Product Information

Control No. : ARP-481700-M3

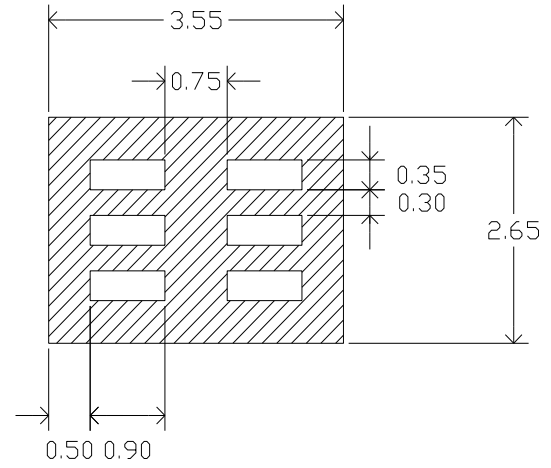
Issued on December 13, 2019

6.Recommendation Land Pattern (Unit:mm)

Land Pattern



Resist Pattern



Terminal	
①	Common
②	5G-Input
③	2G-Input
※	GND

Unit : mm