

Product Information

Control No. : ARP4912200-E 1

Issued on January 31, 2025

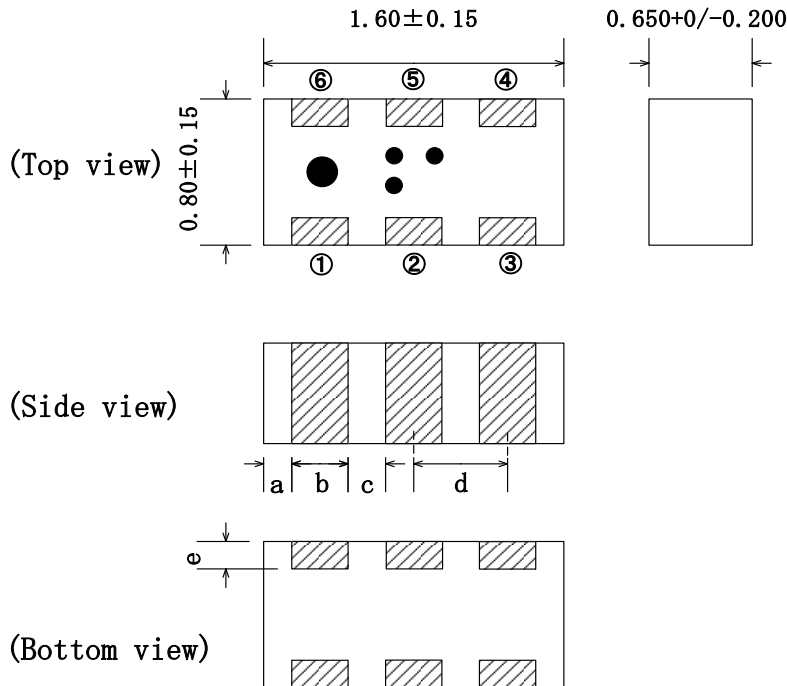
1. Type No.

HMD9122E

RoHS Compliant Part

2. Dimension (Unit : mm)

AEC-Q200 Compliant Part



Measured Data

Terminal	
①	GND
②	Common
③	GND
④	Band2(Hi)
⑤	GND
⑥	Band1(Lo)

Terminal Dimensions	
a	0.15 +/- 0.15
b	0.30 +/- 0.10
c	0.20 +/- 0.10
d	0.50 +/- 0.10
e	0.15 +/- 0.10

3. Electrical characteristics

Band1

Parameter	Specification	Typical	Unit	Remark
fc (Center frequency)	2450	-	MHz	
Pass band frequency	2400-2500	-	MHz	
Nominal impedance	50	-	ohm	
Insertion Loss at 25 degC.	0.8 Max.	0.64	dB	
Insertion Loss at -40 to +125 degC.	0.9 Max.	-	dB	
Common port return loss in BW	10 Min.	17.5	dB	
Band1 Port Return Loss in BW	10 Min.	16.2	dB	
Attenuation (MHz)	at 4800 - 5000	35 Min.	40.2	dB
	at 7200 - 7500	20 Min.	30.3	dB

Band2

Parameter	Specification	Typical	Unit	Remark
fc (Center frequency)	6150	-	MHz	
Pass band frequency	5150-7150	-	MHz	
Nominal impedance	50	-	ohm	
Insertion Loss at 25 degC.	1.0 Max.	0.84	dB	
Insertion Loss at -40 to +125 degC.	1.2 Max.	-	dB	
Common port return loss in BW	10 Min.	11.0	dB	
Band2 port return loss in BW	10 Min.	12.8	dB	
Attenuation (MHz)	at 2400 - 2500	38 Min.	40.3	dB
	at 10300 - 14300	20 Min.	21.0	dB
	at 15300 - 20000	15 Min.	15.1	dB

Isolation

Parameter	Specification	Typical	Unit	Remark
Isolation (MHz)	at 2400 - 2500	38 Min.	40.4	dB
	at 4800 - 6000	35 Min.	40.2	dB
	at 6000 - 7150	25 Min.	30.0	dB

Approved by	Confirmed by	Raised by
Y.Imai	S. Suzuki	R.Takahashi

4. Note

4.1 Operating Temperature Range

: -40 to +125 degC.

4.2 Storage Temperature Range before soldering in taping package

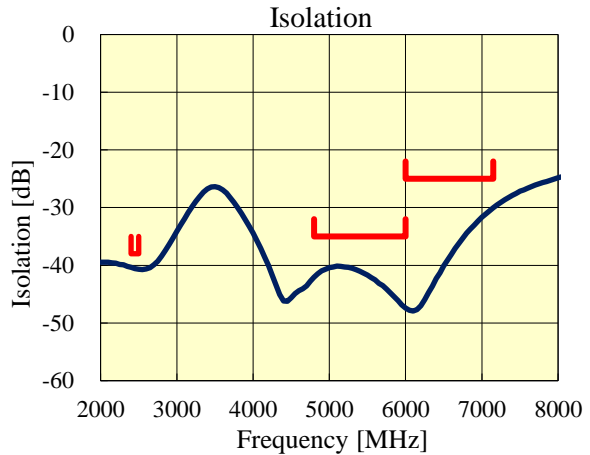
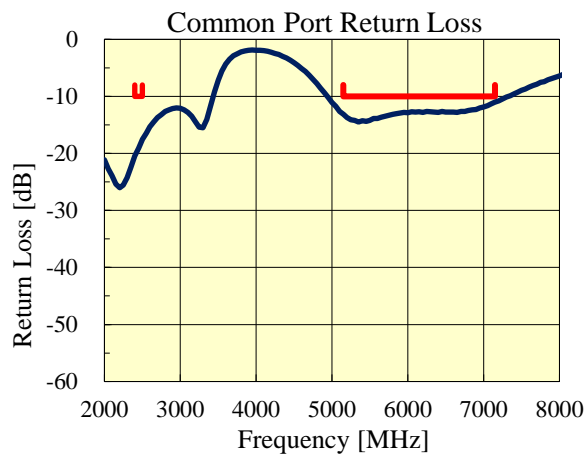
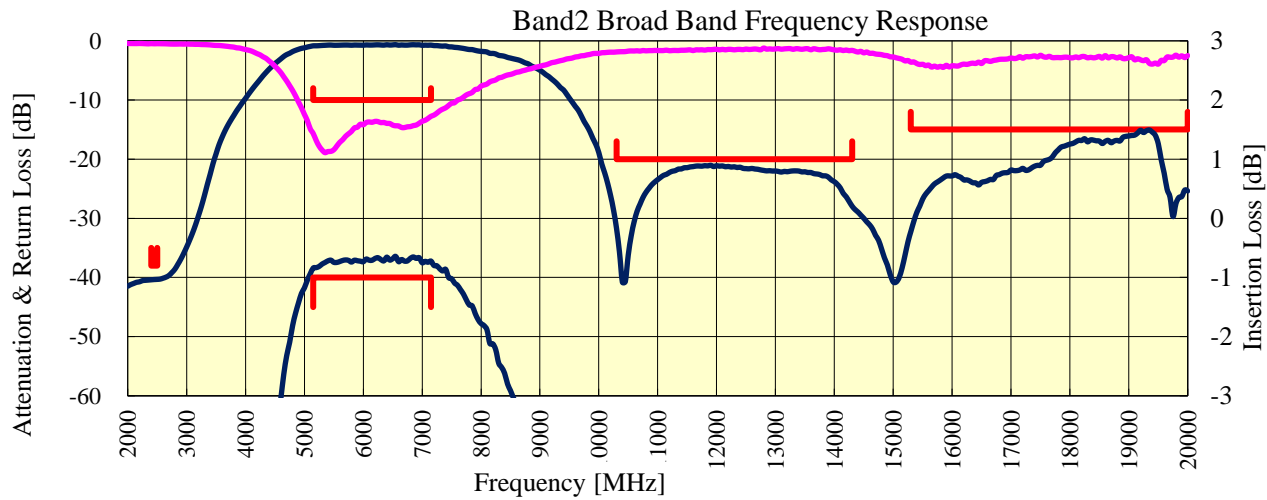
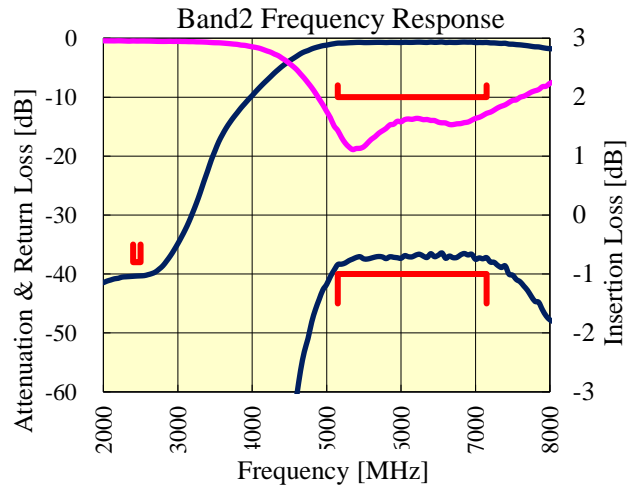
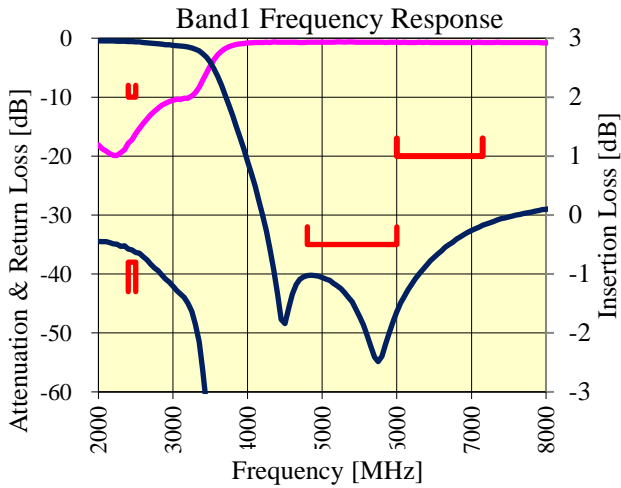
: -20 to +35 degC.

4.3 Standard Reel Quantity

: 3,000 pcs (per reel, per bag)

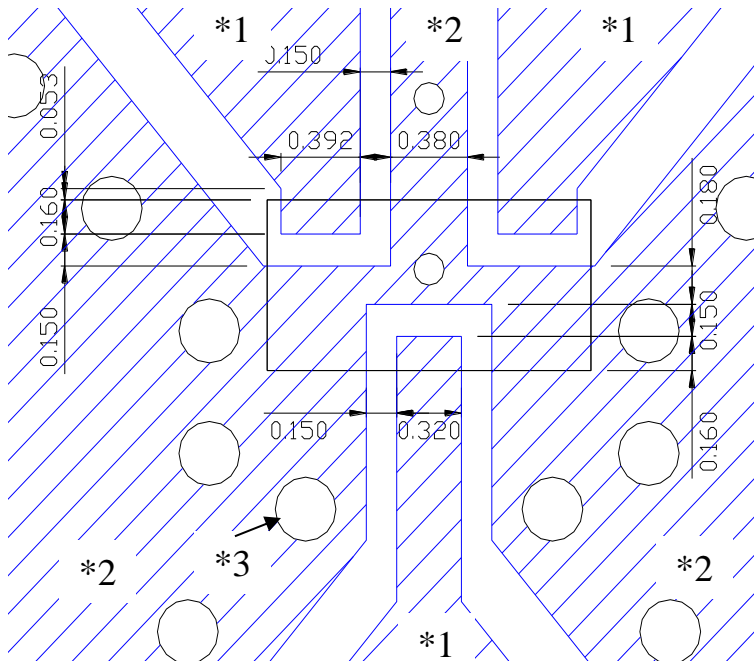
5. Representative characteristics

Measured Data

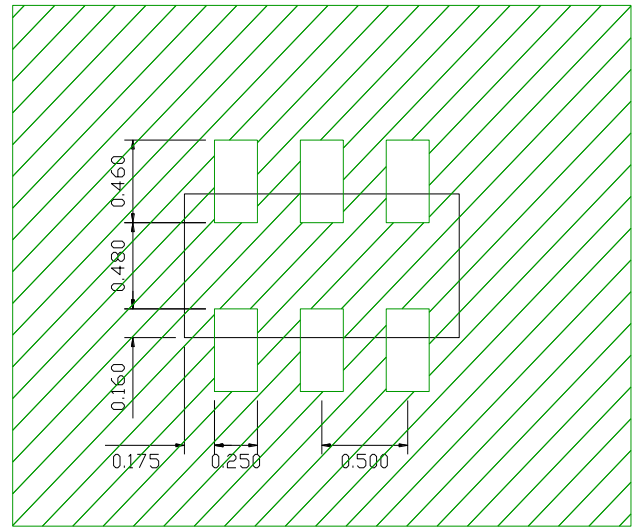


6.Recommendation Land Pattern (Unit:mm)

Land Pattern



Resist Pattern



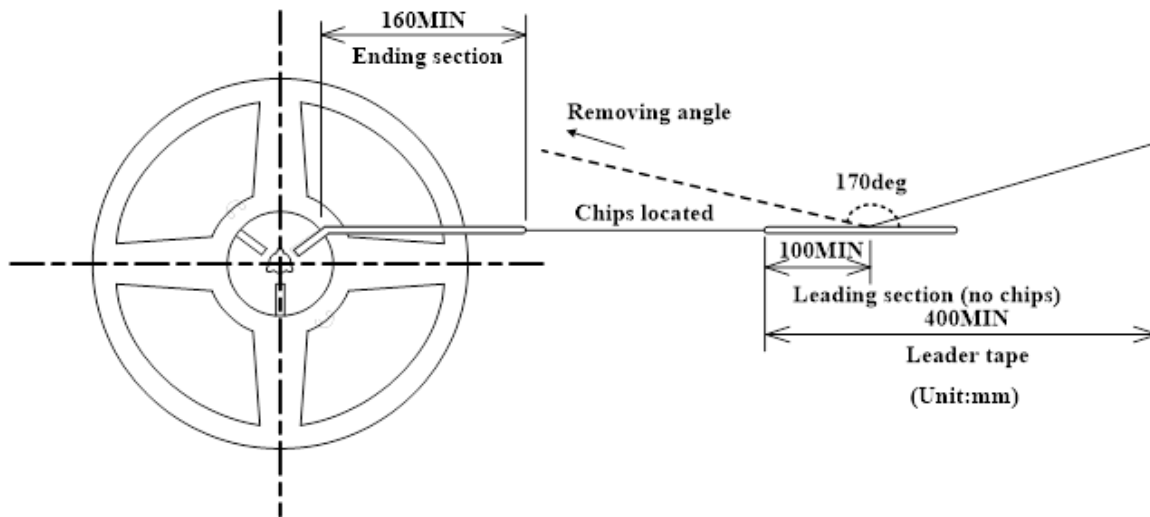
- *1 50 ohm impedance Line**
- *2 Ground Plane**
- *3 Through Hole ($\phi 0.3$ mm)**
- *4 Through Hole ($\phi 0.15$ mm)**

7. Packing method

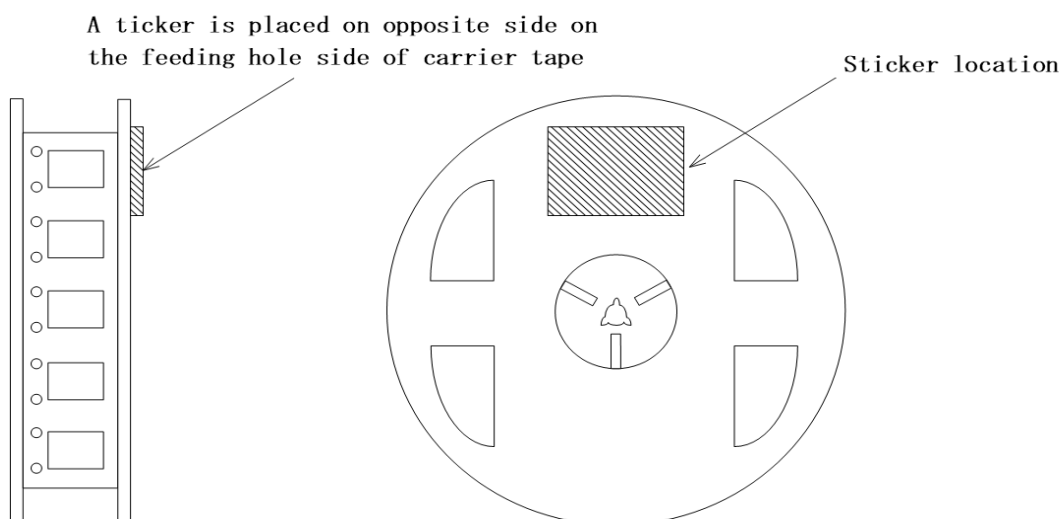
7. 1 Taping conditions

Taping conditions are shown below. Refer to IEC60286-3

- (1) Tape must be wound clockwise with the feeding hole coming to the right hand side.
- (2) Top cover tape must not cover feeding holes of carrier tape and/or show out of carrier tape.
- (3) A blank section carrying no chips of a length of 160mm min. on ending section and 100mm min. on leading section must be provided.
- (4) A leading section of 400mm min. must be provided on top cover tape.



- (5) To end tape winding, the leading section of top cover tape must be stuck on a side of a reel with adhesive tape.
- (6) Removing force of top cover tape in the unwinding with an angle of 170 degrees between the removed side of a reel and carrier tape must be 0.1 to 1.0N.
- (7) When the embossed tape is turned upside down with the sealing tape peeled off, the filter body inside of the tape must fall off and the mounter must not cause a take-up mistake.
- (8) A sticker carrying Soshin product №, quantity, lot №, inspection date is to be placed on the specified side of reels. And Lot No. means our production control number. The shipment records are available if requested.

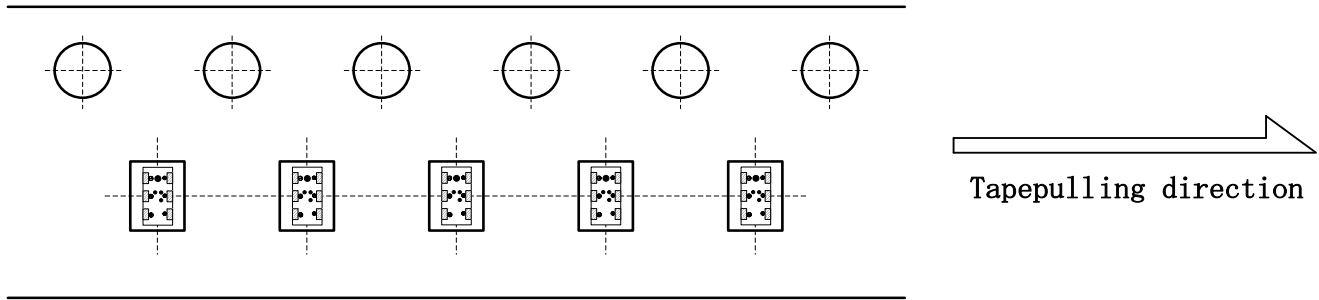


Product Information

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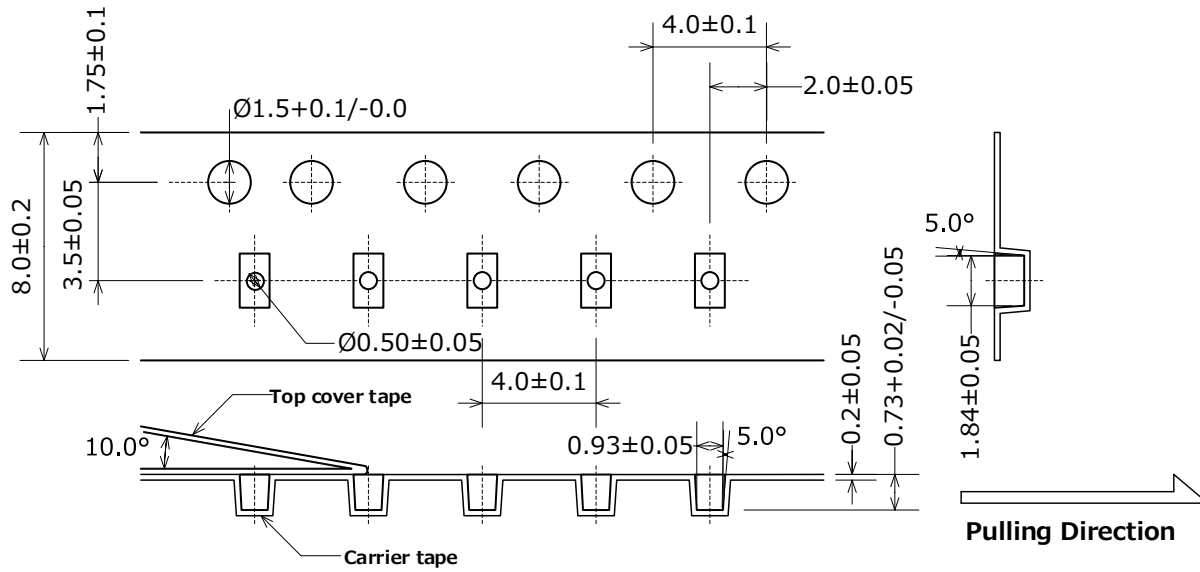
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- (9) Product orientation must be consistent. Products must not be positioned out of the mounting location.

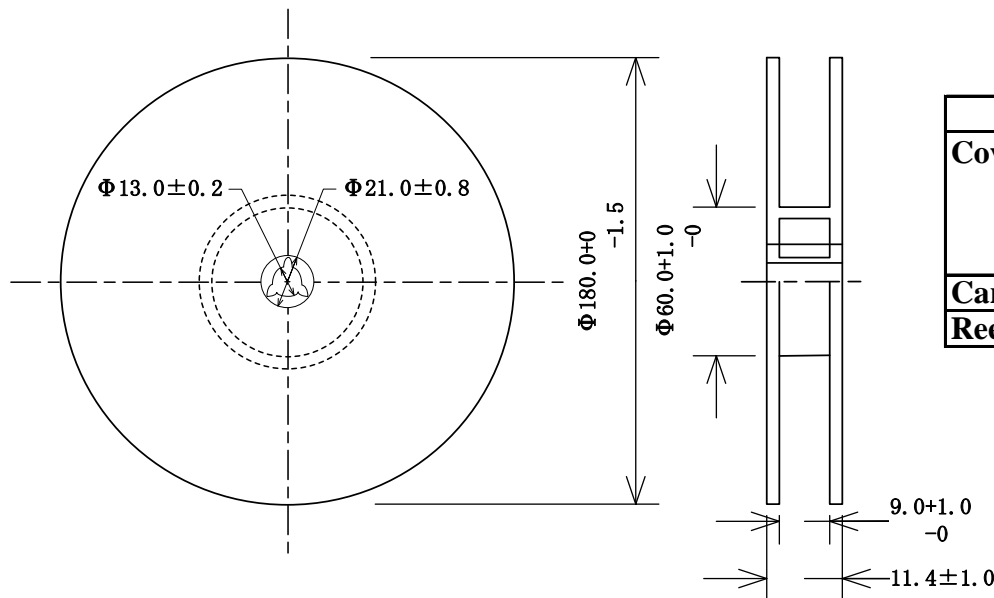


- (10) A taping reel must be sealed in a plastic bag, individually.
 (11) Tape-packaged quantity
 The quantity is 3,000 pcs per single tape-package as a rule.

7. 2 Dimensions of the carrier tape (Unit : mm)



7. 3 Carrier tape reel dimensions (Unit : mm)



Material	
Cover tape	Polyester + LDPE + PS resin+ Conductive coat
Carrier tape	PS+Carbon
Reel	PS