Control No.: ARP-482100-H 1

Issued on April 11, 2025

1. Type No.

HMD821F

2. Dimension (Unit : mm) 2. 00 ± 0. 20 0. 70 ± 0. 10 (Top view) 2 1 (Side view) (Bottom view)

RoHS Compliant Part

Terminal					
(1)	GND				
2	Input				
3	GND				
4	Output1				
(5)	GND				
6	Output2				

Terminal Dimensions				
a	0.15typ.			
b	0.20typ.			
С	0.30 +/- 0.15			
d	0.35 +/- 0.15			
e	0.65 +/- 0.15			

3. Electrical characteristics

Parameter	Specification	Typical	Unit	Remark
Frequency range	1700-2200	=	MHz	
Nominal impedance	50	=	ohm	
Insertion Loss at 25degC.	0.5 Max.	0.20	dB	
Return Loss	10 Min.	16.3	dB	
Isolation	15 Min.	20.1	dB	
Amplitude balance	0.2 Max.	0.06	dB	
Phase balance	2 Max.	0.38	deg	

4. Note

4.1 Operating Temperature Range

4.2 Storage Temperature Range

4.3 Max input power (Avg/CW)

4.4 Standard Reel Quantity

: -40 to +105 degC.

: -20 to +35 degC. (In a Taping Package)

· 3W

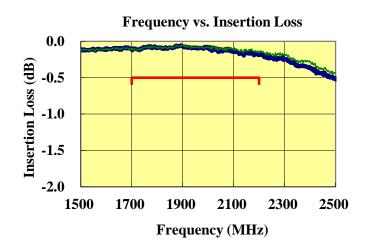
: 2,000 pcs (per reel, per bag)

Approved by	Confirmed by	Raised by
Y.Imai	S.Suzuki	M.Kawano

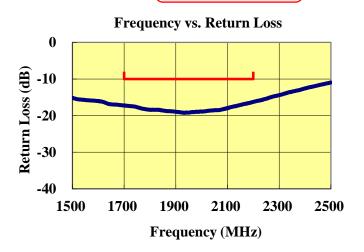
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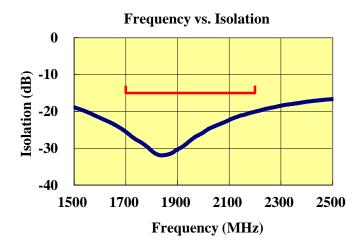
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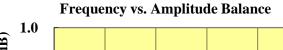
5.Representative characteristics

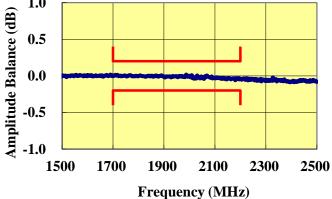


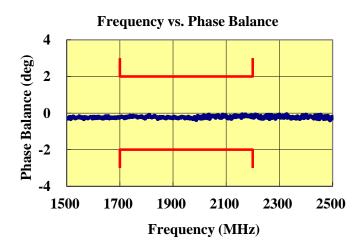
Measured







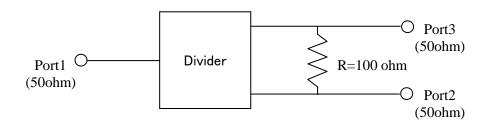




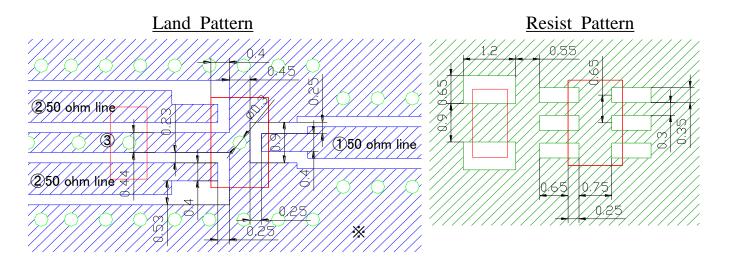
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6.Measurement Circuit

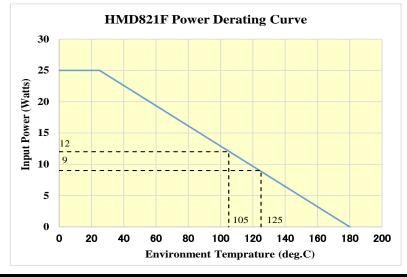


7.Recommended Land Pattern (Unit:mm)



- ① Input
- ② Output1,2
- ③ 1608Size R=100ohm
- ₩ GND

8.Power Derating Curve



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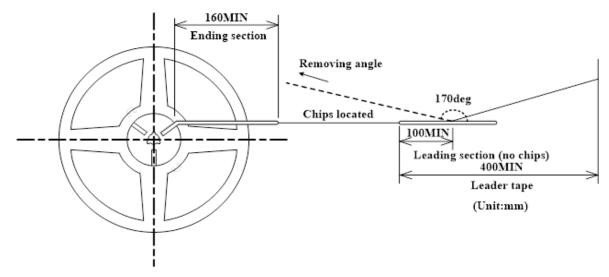
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7. Packing method

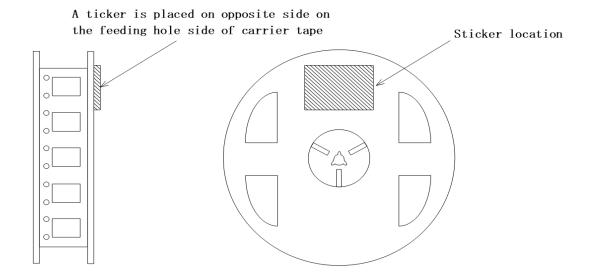
7. 1 Taping conditions

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.



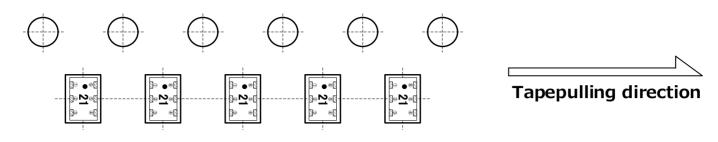
- (5) To end tape winding, the leading section of top cover tape must be stuck on a side of a reel with adhesive tape.
- (6) Removing force of top cover tape in the unwinding with an angle of 170 degrees between the removed side of a reel and carrier tape must be 0.1 to 1.0N.
- (7) When the embossed 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.



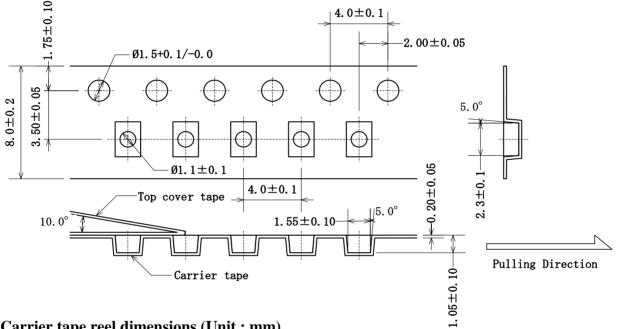
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(9) Product orientation must be consistent. Products must not be positioned out of the mounting location.



- (10) A taping reel must be sealed in a plastic bag, individually.
- (11) Tape-packaged quantity The quantity is 2,000 pcs per single tape-package as a rule.
- **Dimensions of the carrier tape (Unit: mm)**



Carrier tape reel dimensions (Unit: mm)

