

Product Information

Control No. : ARP-4270300-G 1

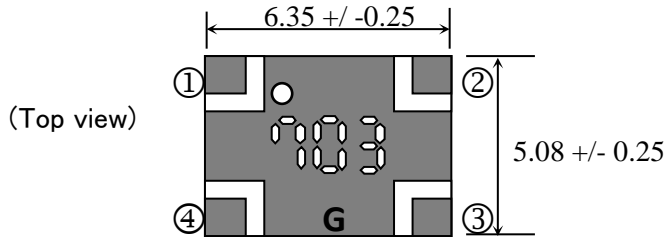
Issued on June 29, 2023

1. Type No.

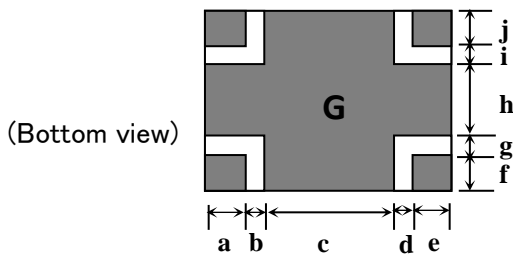
HMD2703A-HYB0750

RoHS Compliant Part

2. Dimension (Unit : mm)



	Terminal 1	Terminal 2	Terminal 3	Terminal 4
①	IN	ISOLATION	OUT(90deg)	OUT(0deg)
②	ISOLATION	IN	OUT(0deg)	OUT(90deg)
③	OUT(90deg)	OUT(0deg)	IN	ISOLATION
④	OUT(0deg)	OUT(90deg)	ISOLATION	IN
G	GND	GND	GND	GND



Terminal Dimensions	
a	1.02 +/- 0.10
b	0.51 +/- 0.20
c	3.30 +/- 0.20
d	0.51 +/- 0.20
e	1.02 +/- 0.10
f	1.02 +/- 0.10
g	0.51 +/- 0.20
h	2.08 +/- 0.20
i	0.51 +/- 0.20
j	1.02 +/- 0.10

3. Electrical characteristics

Parameter		Band1	Band2	Band3	Unit	Remark
Frequency Range	Specification	600-900	695-805	731-881	MHz	
Nominal impedance	Specification	50	50	50	ohm	
Isolation	Specification	23 Min.	25 Min.	25 Min.	dB	
	Typical	25.9	28.6	29.3		
Insertion Loss	Specification	0.20 Max.	0.17 Max.	0.20 Max.	dB	
	Typical	0.14	0.12	0.14		
Input port VSWR	Specification	1.15 Max.	1.12 Max.	1.15 Max.	-	
	Typical	1.07	1.05	1.04		
Amplitude balance	Specification	0.35 Max.	0.25 Max.	0.25 Max.	dB	
	Typical	0.13	0.13	0.13		
Phase balance	Specification	90 +/- 4	90 +/- 3	90 +/- 4	deg	
	Typical	89.3	89.5	89.6		

4. Note

- | | |
|---------------------------------|--|
| 4.1 Operating Temperature Range | : -55 to +105 degC. |
| 4.2 Storage Temperature Range | : -40 to +85 degC. (goods alone)
: -20 to +35 degC. (In a Taping Package) |
| 4.3 Input Power | : 150 W Avg/CW |
| 4.4 Standard Reel Quantity | : 1,000 pcs (per reel, per bag) |

Approved by	Confirmed by	Raised by
Y.Imai	S.Suzuki	H.Aizawa

SOSHIN ELECTRIC CO., LTD

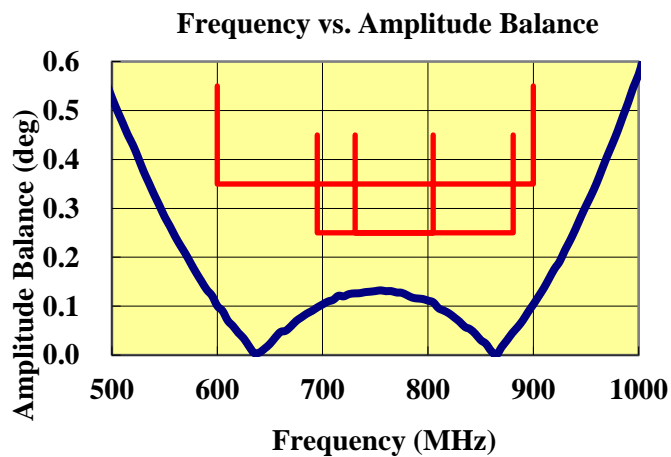
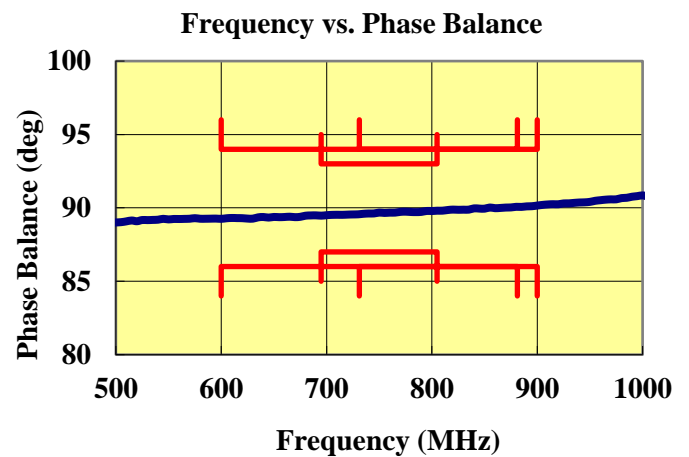
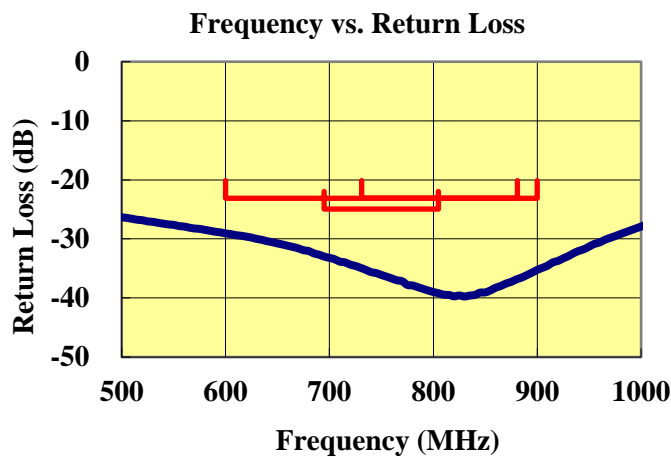
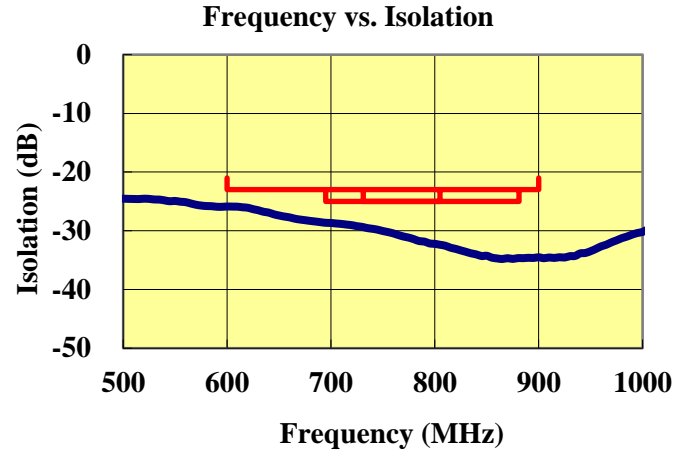
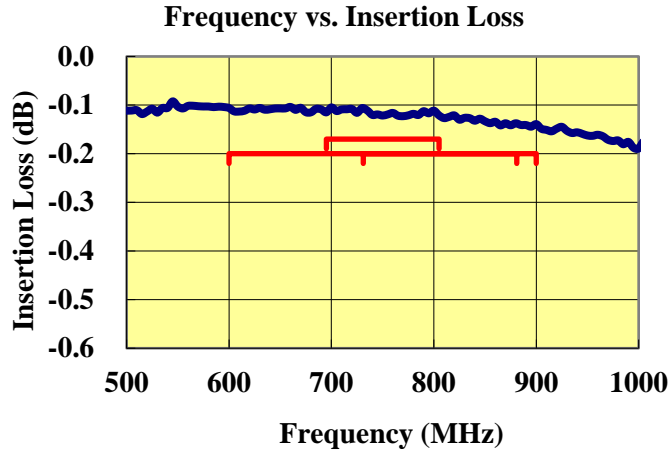
Product Information

Control No. : ARP-4270300-G 2

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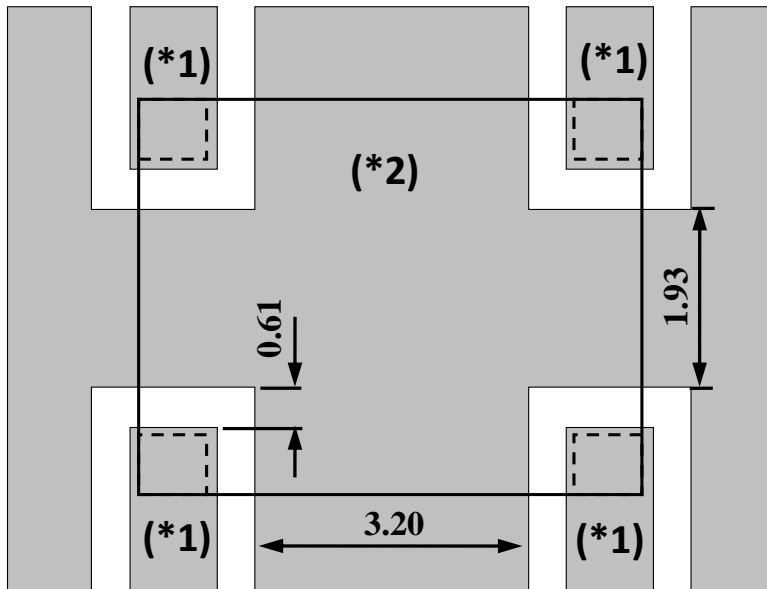
5.Representative characteristics

Measured



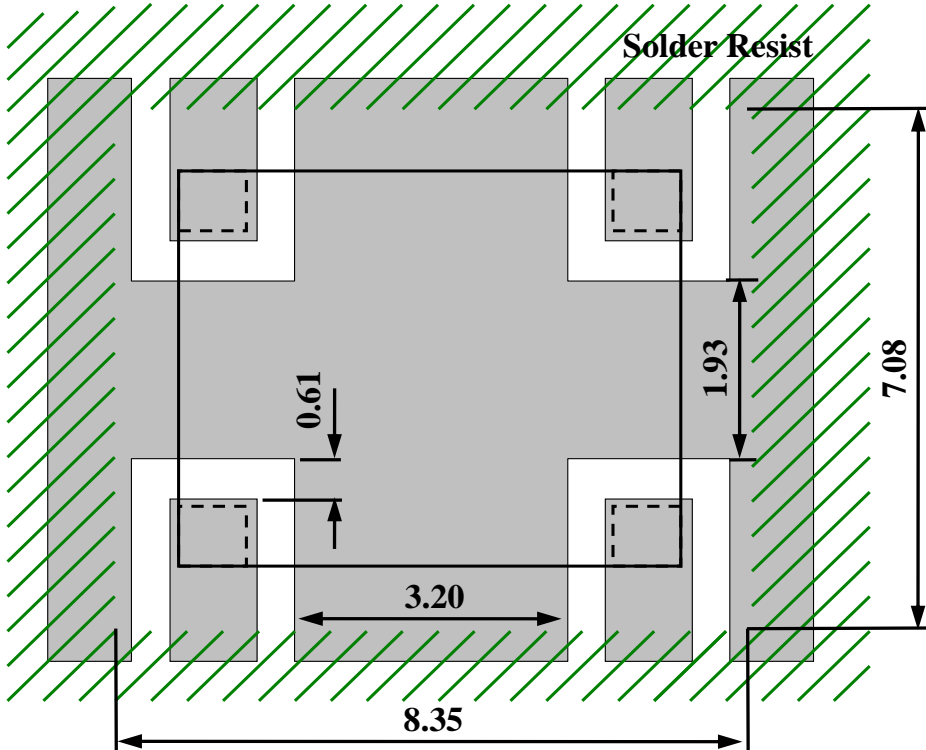
6.Recommended Land Pattern (Unit:mm)

Land Pattern



(*1) 50 ohm impedance line
(*2) Ground Plane

Resist Pattern

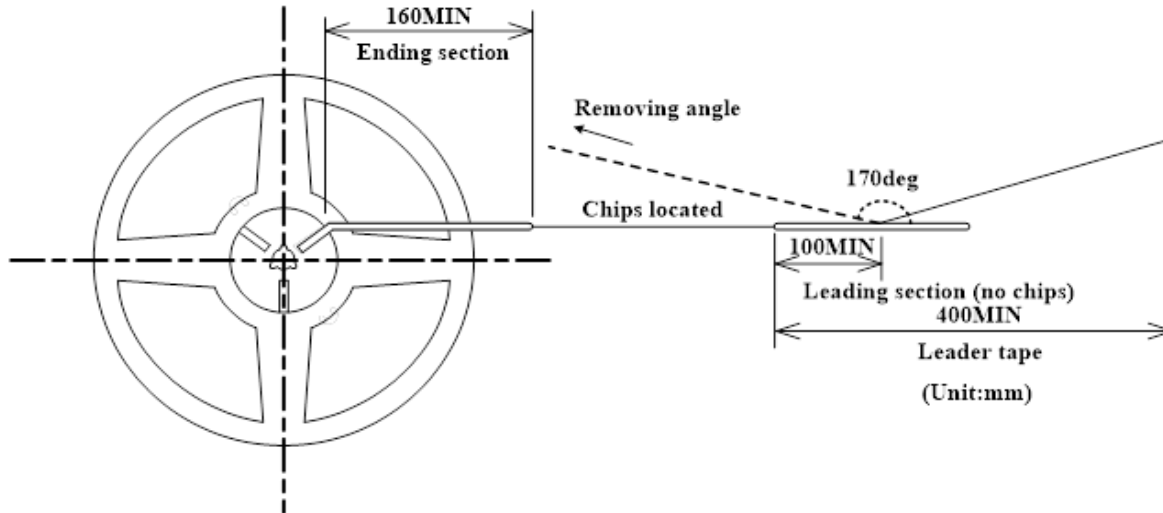


7. Packing method

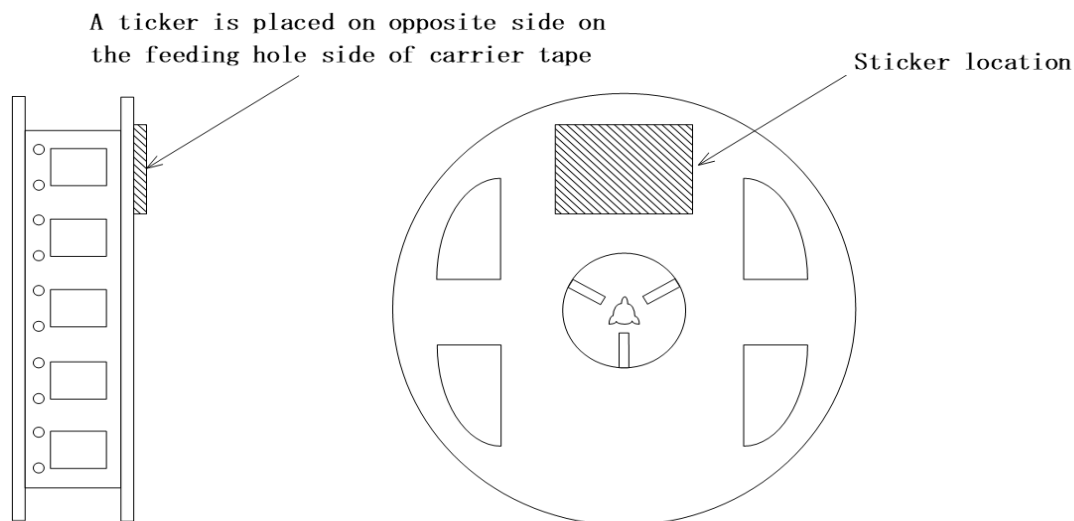
7. 1 Taping conditions

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.

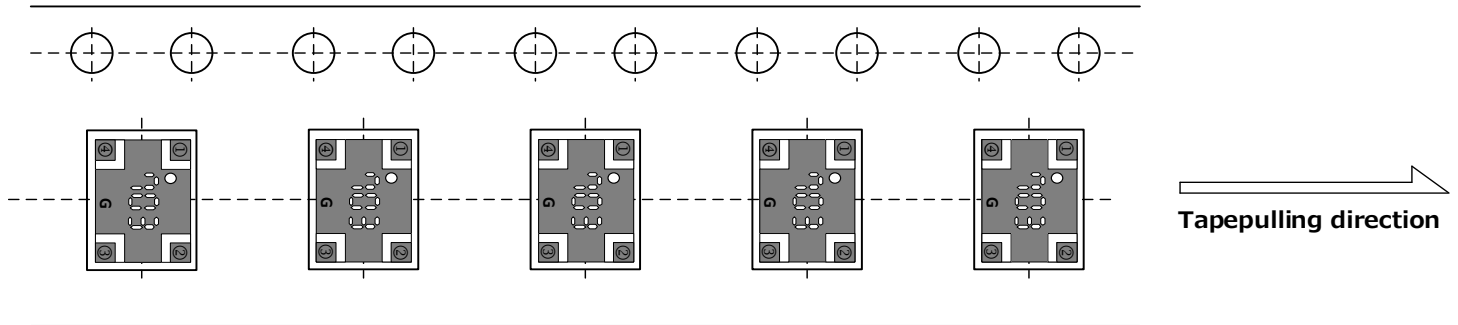


Product Information

Control No. : ARP-4270300-G 5

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

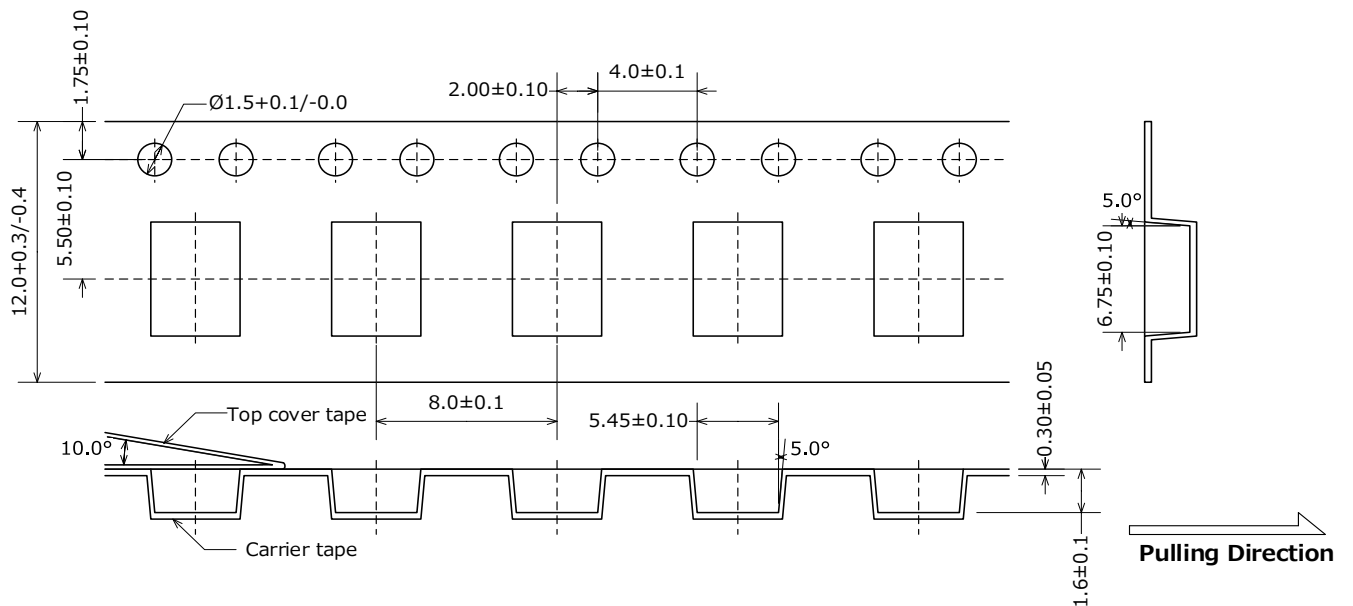


(10) A taping reel must be sealed in a plastic bag, individually.

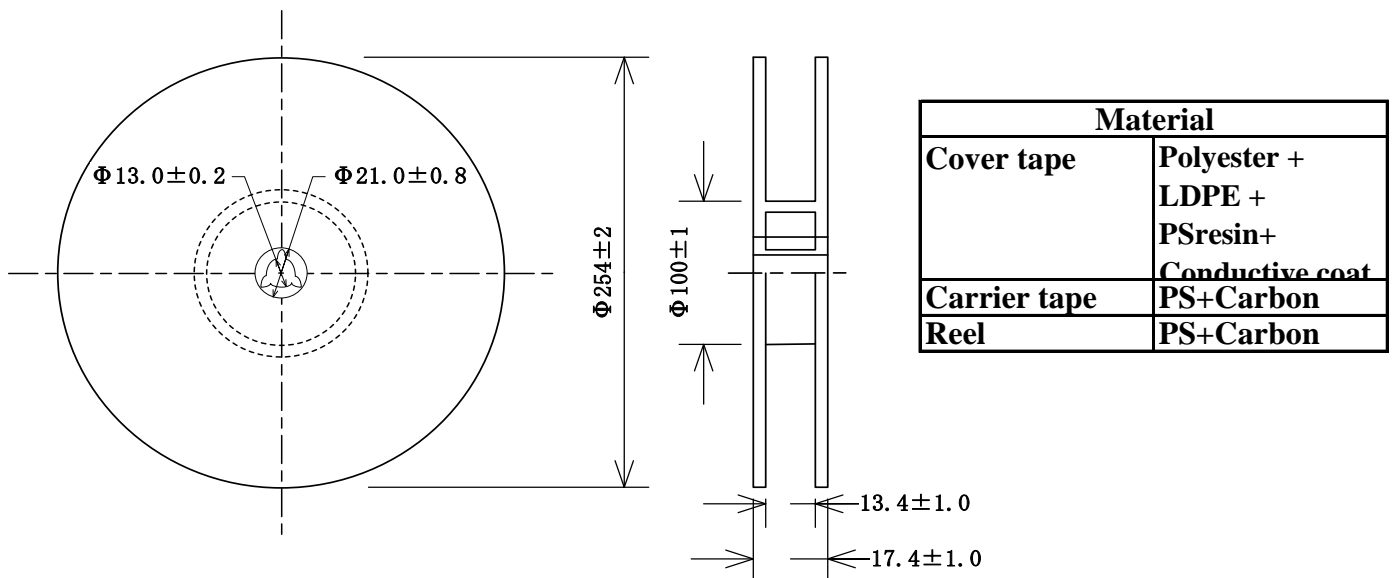
(11) Tape-packaged quantity

The quantity is 1,000 pcs per single tape-package as a rule.

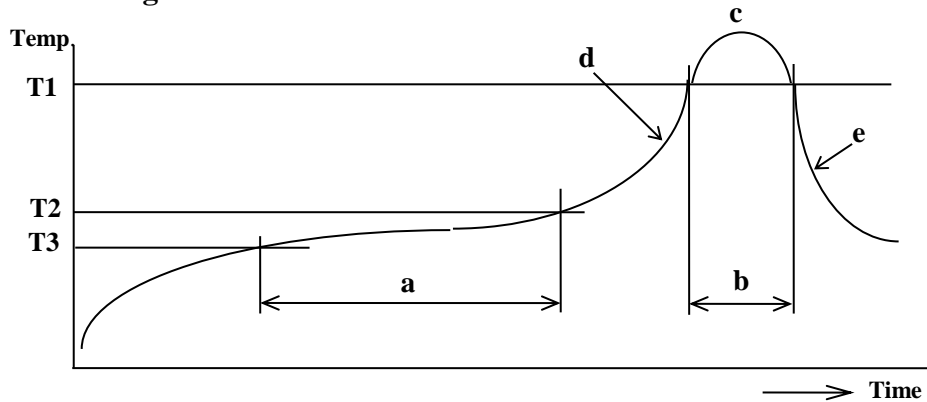
7. 2 Dimensions of the carrier tape (Unit : mm)



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



8. Recommended use conditions Reflow soldering conditions



(1) High temperature reflow conditions (Products may be put through reflow oven 2 times maximum.)

T1: 230deg C, T2: 180deg C, T3: 150deg C

a: Preheating for 60 - 120 seconds,

b: Heating for 30 - 50 seconds,

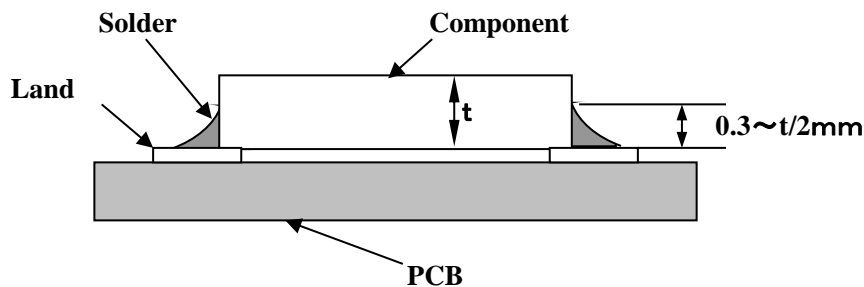
c: Peak temperature 260 ± 5 deg C, 5 - 10 seconds

d: Temperature ramp-up slope – 10deg C, max./1 sec.

e: Temperature ramp-down slope – 8deg C, max./1 sec.

*Solder build-up

Formation of a solder fillet measuring 0.3 mm or up to a half of the product thickness (t) at edges external electrode must be ascertained. Solder build-up which is shorter or greater than this dimension may cause detrimental effects on the mechanical strength and/or variation in electrical performance.



Example) When a 0.3 mm thick solder mask is used, fillets will be about 0.95 mm