

Product Information

Control No. : ARP-4271800-J 1

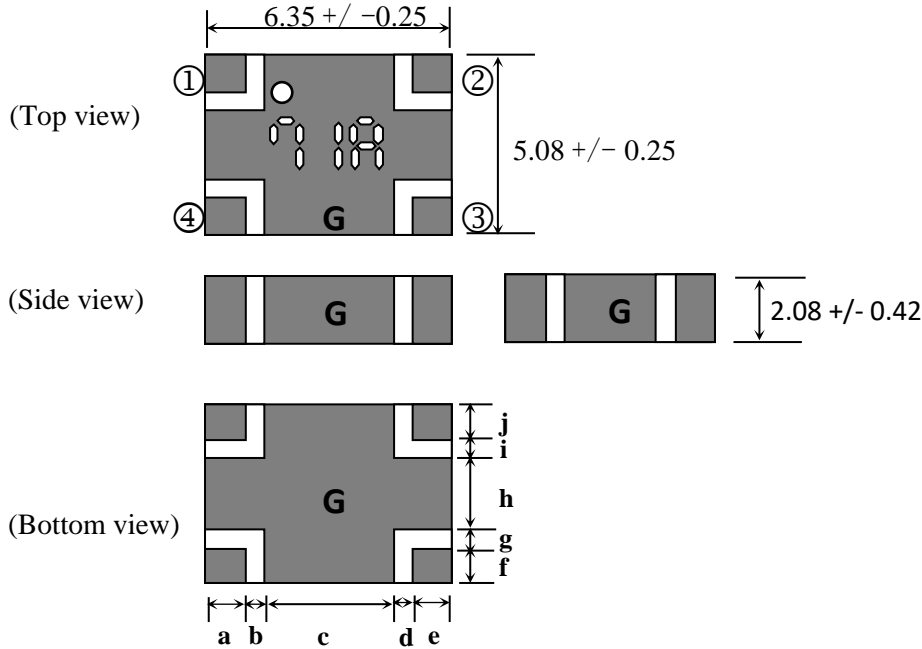
Issued on April 5, 2023

1. Type No.

HMD2718A-30M0850

RoHS Compliant Part

2. Dimension (Unit : mm)



Terminal		
①	Input	Direct
②	Direct	Input
③	Isolation	Coupled
④	Coupled	Isolation
G	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	Band4	Band5	Unit
Frequency Range	Specification	800-1000	700-800	869-894	925-960	600-700	MHz
Nominal impedance	Specification	50	50	50	50	50	ohm
Mean Coupling	Specification	30.2 +/- 1.5	30.4 +/- 1.5	30.0 +/- 1.5	30.0 +/- 1.5	31.5 +/- 1.5	dB
	Typical	30.49	30.83	30.41	30.40	31.48	
Insertion Loss	Specification	max 0.10	max 0.10	max 0.075	max 0.075	max 0.10	dB
	Typical	0.056	0.046	0.049	0.056	0.044	
VSWR	Specification	max 1: 1.15	max 1: 1.22	max 1: 1.12	max 1: 1.12	max 1: 1.22	-
	Typical	1.07	1.06	1.07	1.07	1.06	
Directivity	Specification	min 20	min 20	min 20	min 20	min 20	dB
	Typical	27.33	26.90	27.86	28.26	27.22	
Frequency Sensitivity	Specification	max +/- 0.40	max +/- 0.40	max +/- 0.10	max +/- 0.10	max +/- 0.80	dB
	Typical	0.10	0.25	0.01	0.01	0.40	
Group Delay Terminal 1-2	Specification	0.11 +/- 0.04	0.11 +/- 0.04	0.11 +/- 0.04	0.11 +/- 0.04	0.11 +/- 0.04	ns
	Typical	0.087 - 0.098	0.088 - 0.094	0.095 - 0.098	0.089 - 0.094	0.088 - 0.095	
Group Delay Terminal 1-4	Specification	0.23 +/- 0.04	0.23 +/- 0.04	0.23 +/- 0.04	0.23 +/- 0.04	0.20 +/- 0.04	ns
	Typical	0.215 - 0.225	0.211 - 0.217	0.215 - 0.218	0.218 - 0.225	0.192 - 0.212	

4. Note

- 4.1 Operating Temperature Range : -55 to +105 degC.
 4.2 Storage Temperature Range : -20 to +35 degC. (In a Taping Package)
 4.3 Max Input Power : 225 W Avg/CW (600-1000MHz, -55 to +105 degC.)
 4.4 Standard Reel Quantity : 1,000 pcs (per reel, per bag)

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

SOSHIN ELECTRIC CO., LTD

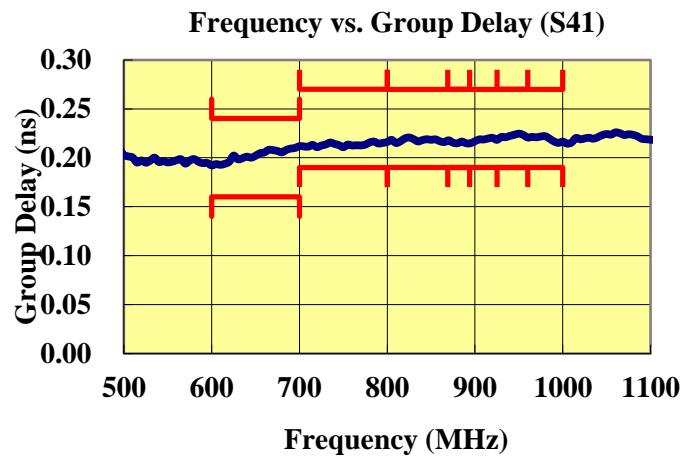
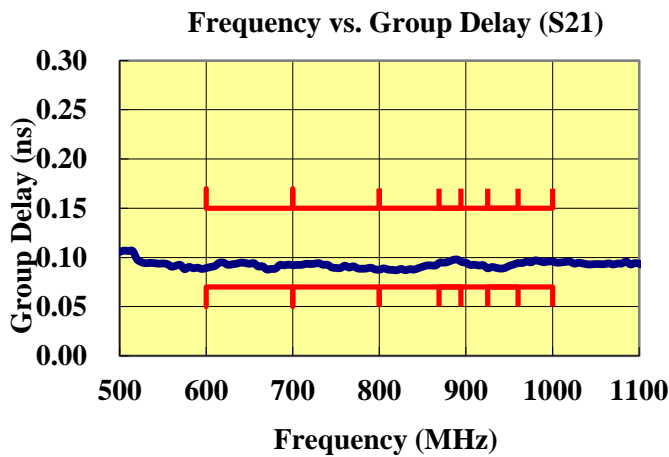
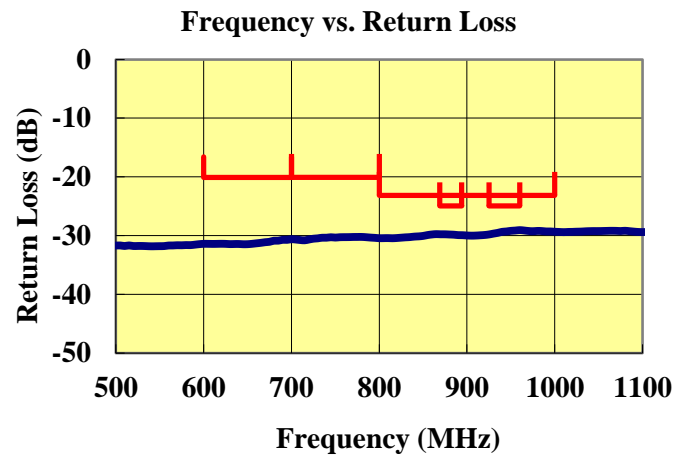
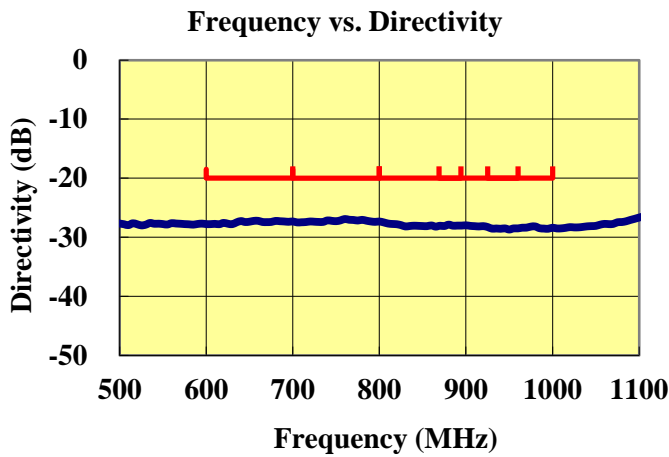
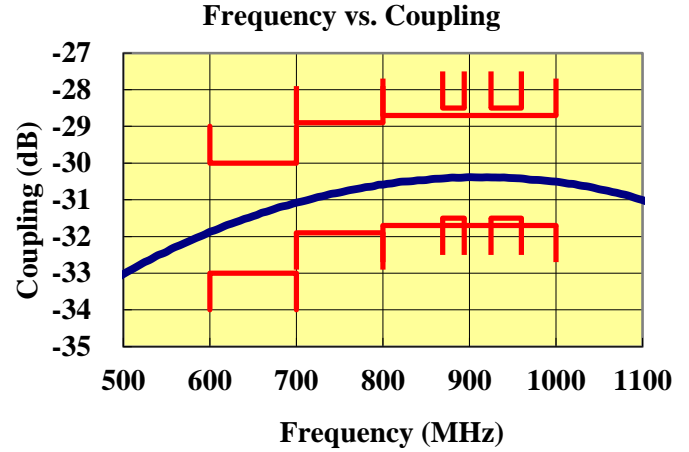
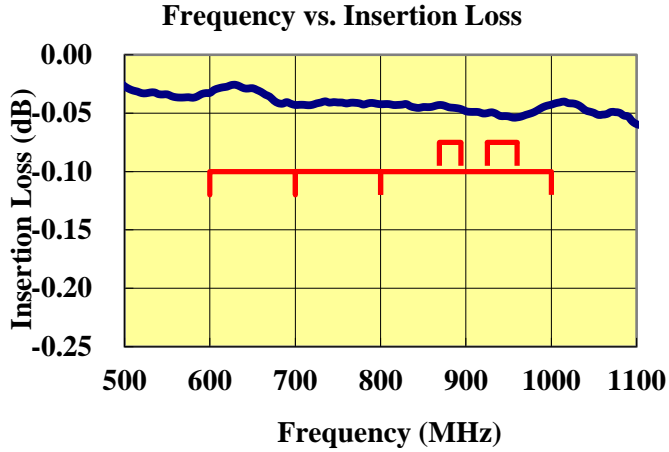
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5.Representative characteristics

Measured Data



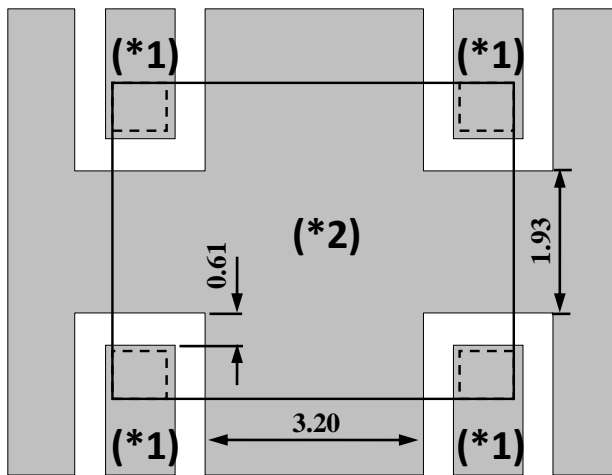
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6.Recommended Land Pattern (Unit:mm)

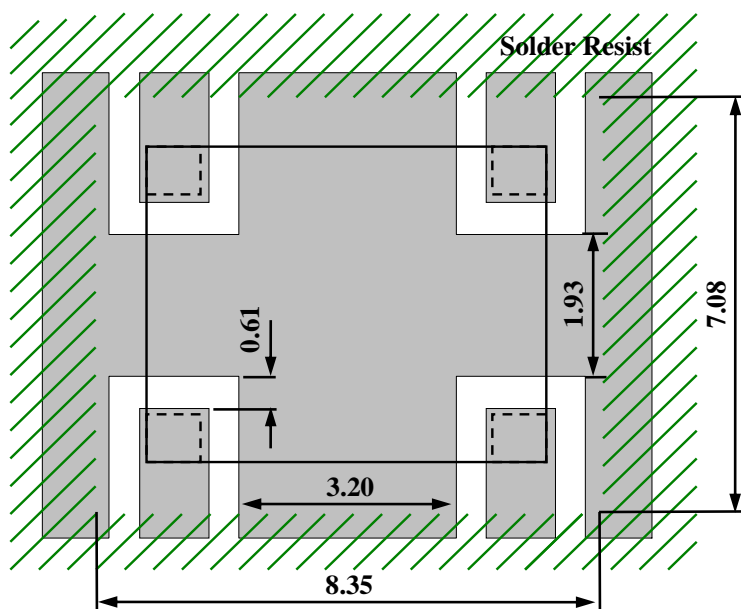
Land Pattern



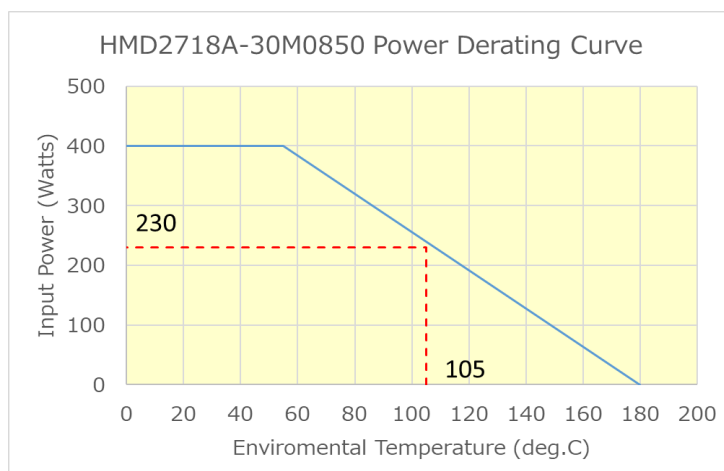
(*1) 50 ohm impedance line

(*2) Ground Plane

Resist Pattern



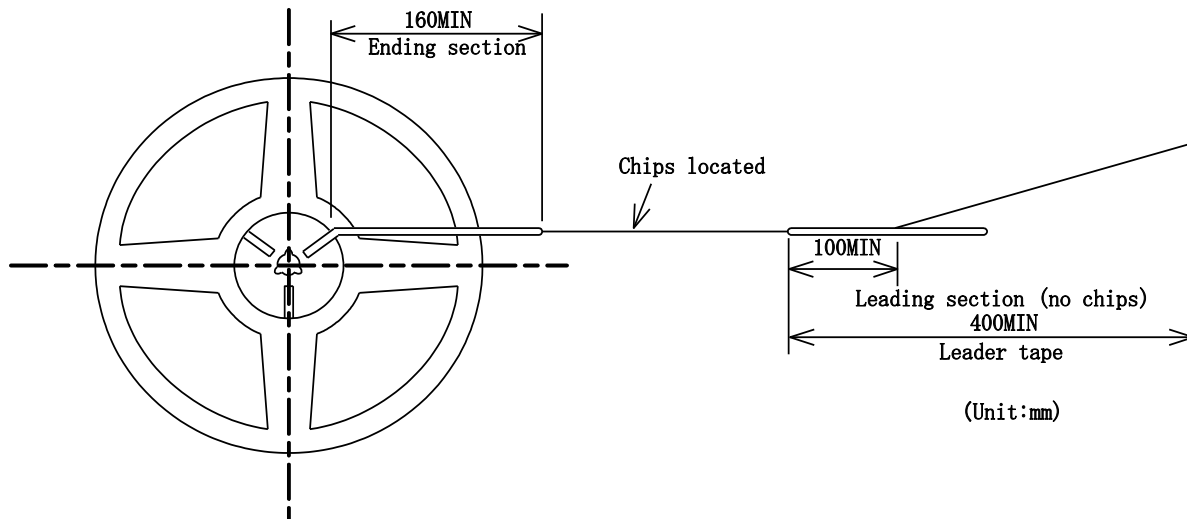
7.Power Derating Curve



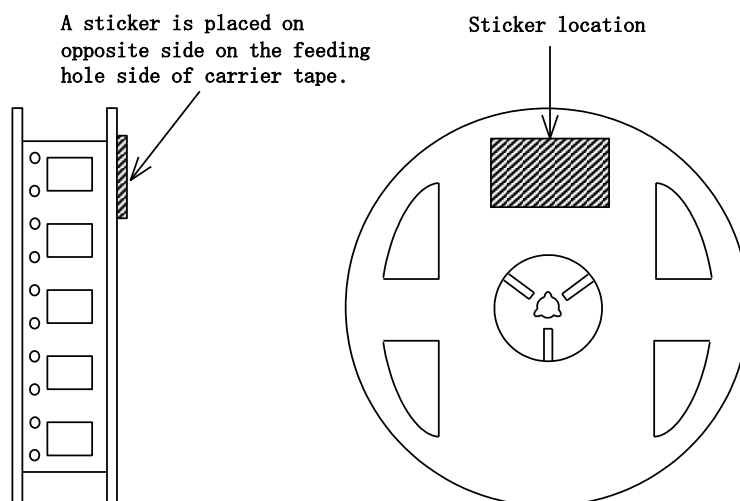
7. Tape packaging method

7.1 Tape packaging must conform to the following specifications. Refer to IEC-286-3 for items which are not included in them.

- (1) Tape must be wound clockwise with the feeding hole coming to the right hand side when the tape end is pulled out towards an operator.
- (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 1.0 N.
- (7) A sticker carrying Soshin product No., quantity, lot No. is to be placed on the specified side of reels.

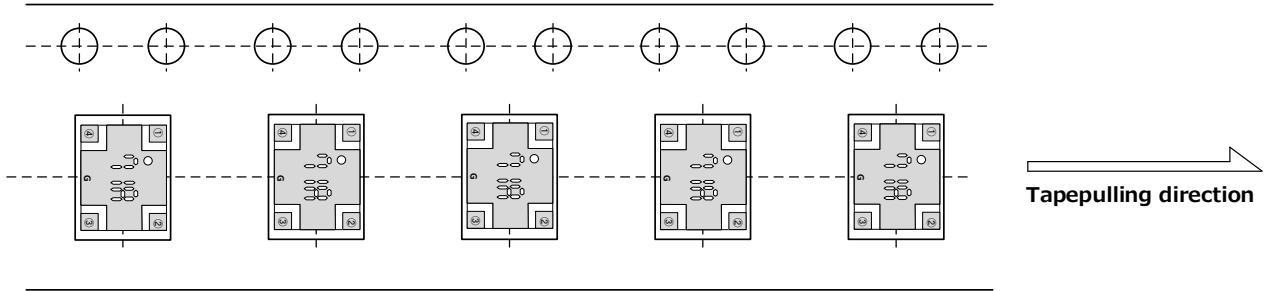


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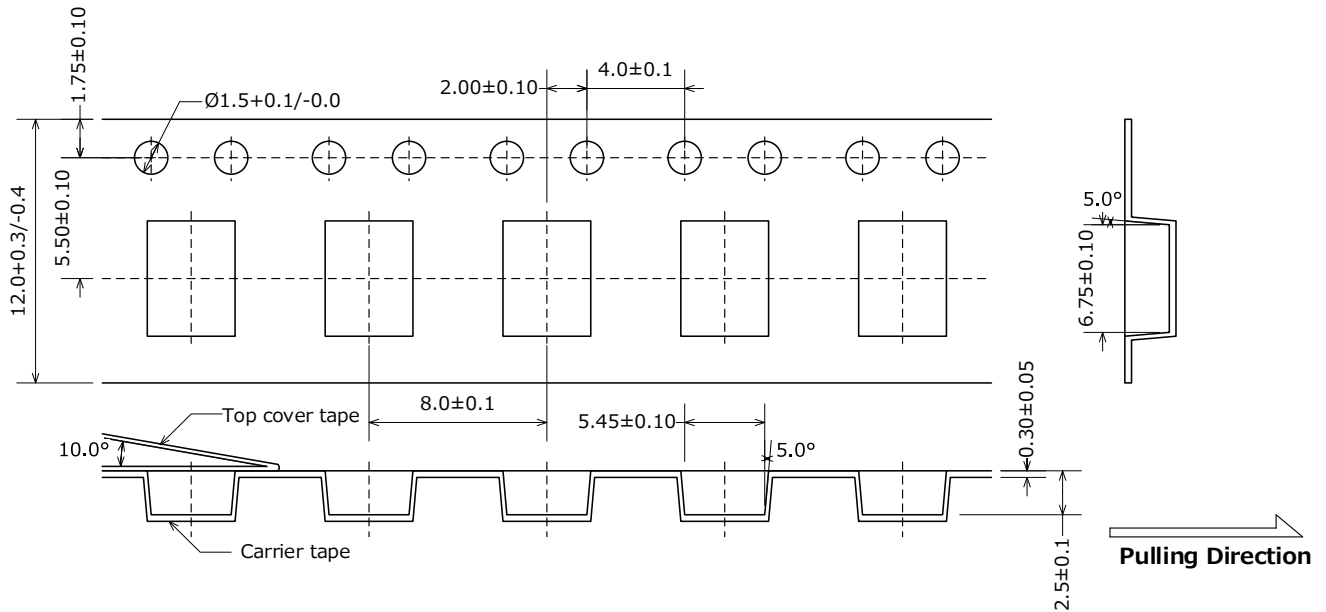
(8) Product orientation must be consistent. Products must not be positioned out of the mounting location.



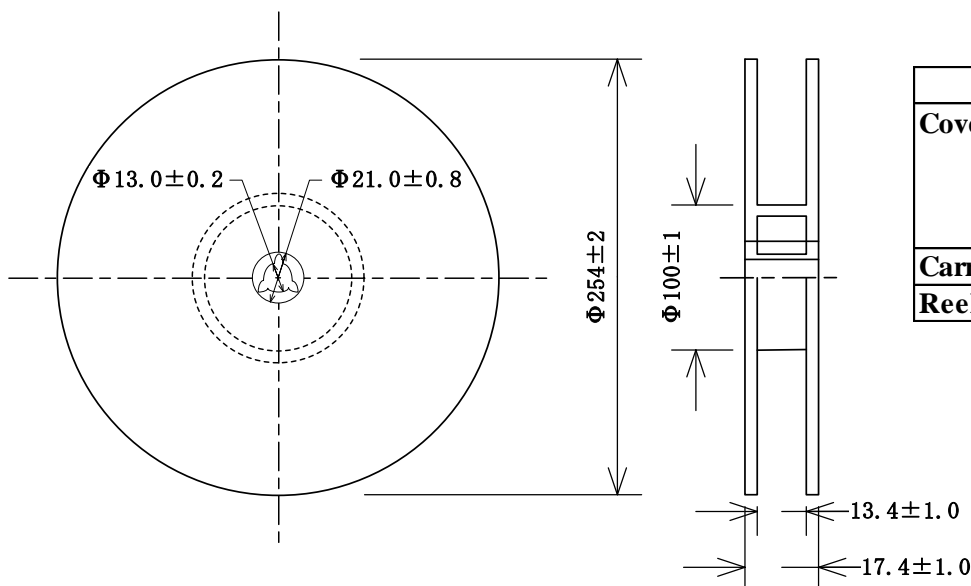
(9) Tape-packaged quantity

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

7.2 Dimensions of the carrier tape (Unit : mm)

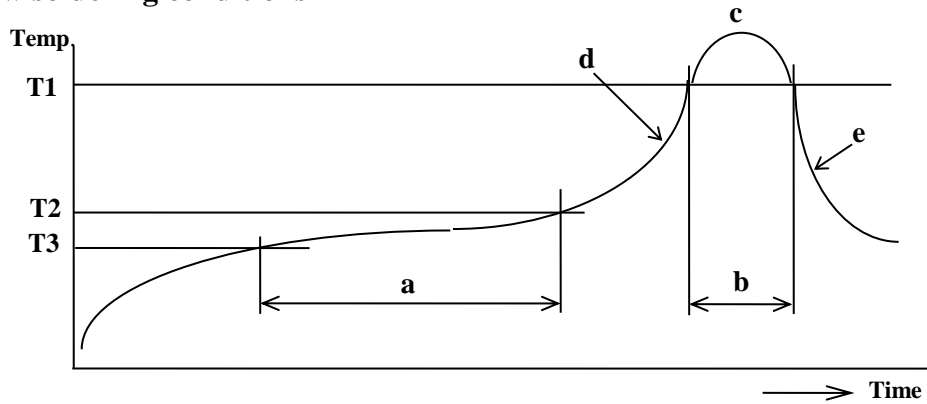


7.3 Carrier tape reel dimensions (Unit : mm)



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

8. Recommended use conditions Reflow soldering conditions



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

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

a: Preheating for 60 - 120 seconds,

b: Heating for 30 - 50 seconds,

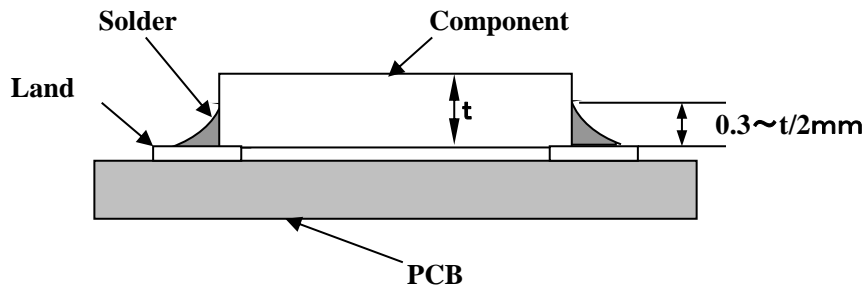
c: Peak temperature 260 ± 5 deg C, 5 - 10 seconds

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