

SAW Filter 2140 MHz
Part No: MP11468

Model: TA1845B
Rev No: 1

Electrostatic Sensitive Device (ESD)

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage: +/-5 V
3. Operating temperature range: -40 °C to +85 °C
4. Storage temperature range: -40 °C to +100 °C
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD: 50V(MM) 100V(HBM)

B. ELECTRICAL CHARACTERISTICS:

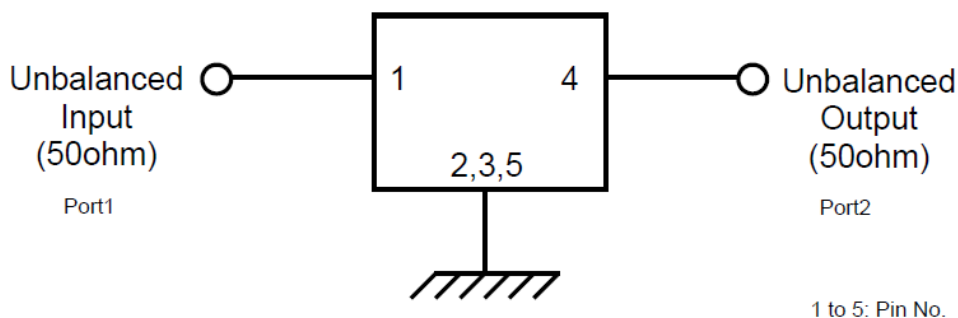
Terminating source impedance: $Z_s = 50 \Omega$ (Single-ended)

Terminating load impedance: $Z_L = 50 \Omega$ (Single-ended)

Parameters Description		Unit	Min.	Typ.	Max.
Center Frequency F_c		MHz	-	2140	-
Insertion Loss	2110~2170 MHz	dB(*1)	-	1.9	2.7
	2110~2155 MHz	dB(*1)	-	1.9	2.7
Amplitude Ripple	2110~2170 MHz	dB	-	0.7	1.5
	2110~2155 MHz	dB	-	0.7	1.5
VSWR	2110~2170 MHz	-	-	1.8	2.3
	2110~2155 MHz	-	-	1.8	2.3
Attenuation (Reference level from 0 dB)					
50 ~ 1710 MHz		dB	35	43	-
1710 ~ 1755 MHz		dB	40	44	-
1920 ~ 1980 MHz		dB	42	46	-
4220 ~ 4340 MHz		dB	30	40	-

(*1) Specification of insertion loss excludes loss that comes from the test board.

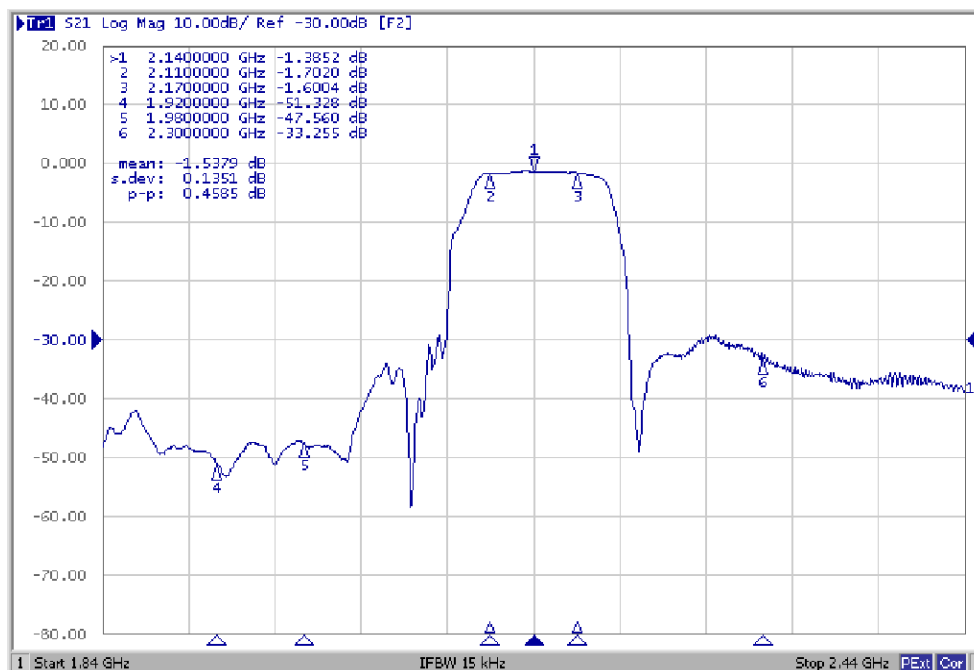
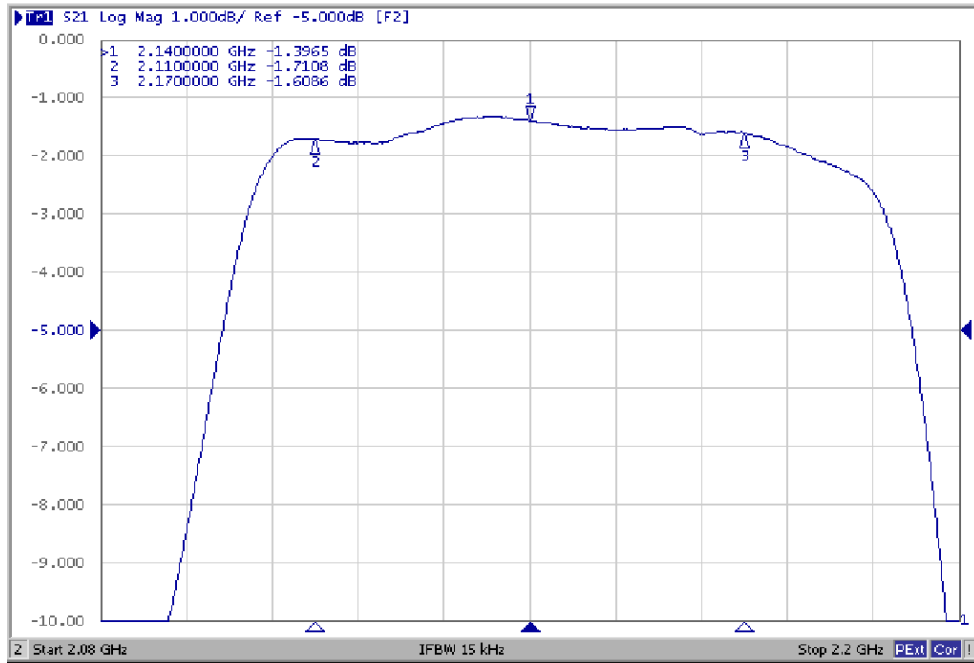
C. MEASUREMENT CIRCUIT:



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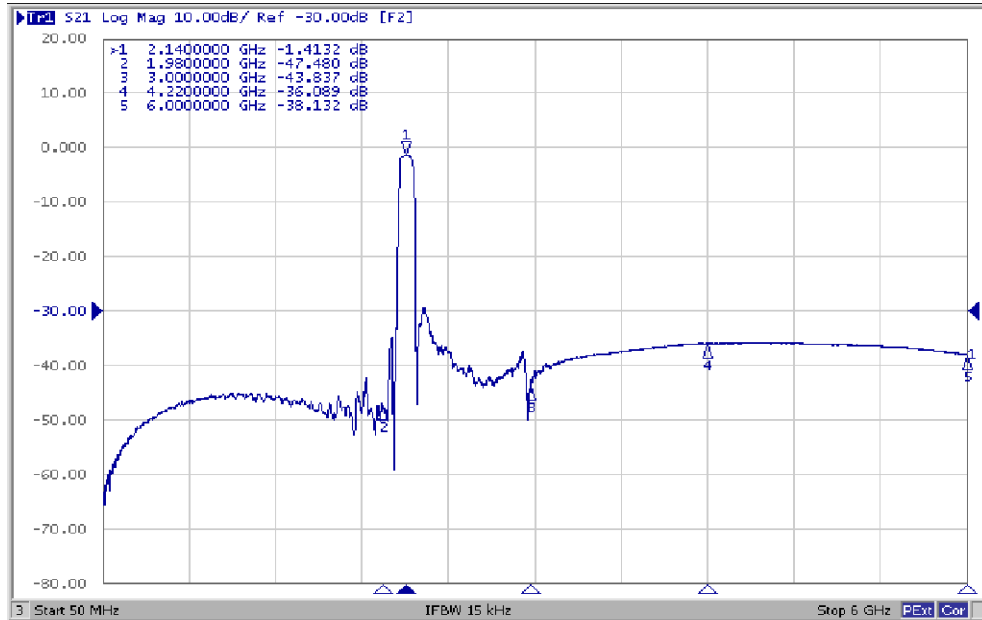
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D. FREQUENCY CHARACTERISTICS



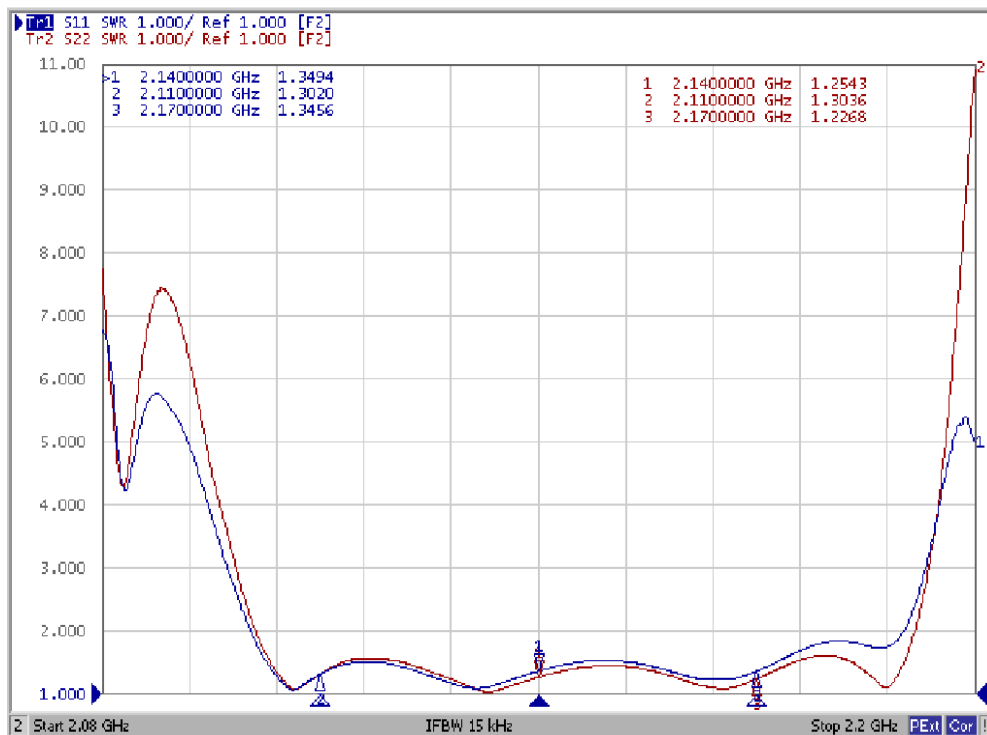
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Reflection functions:

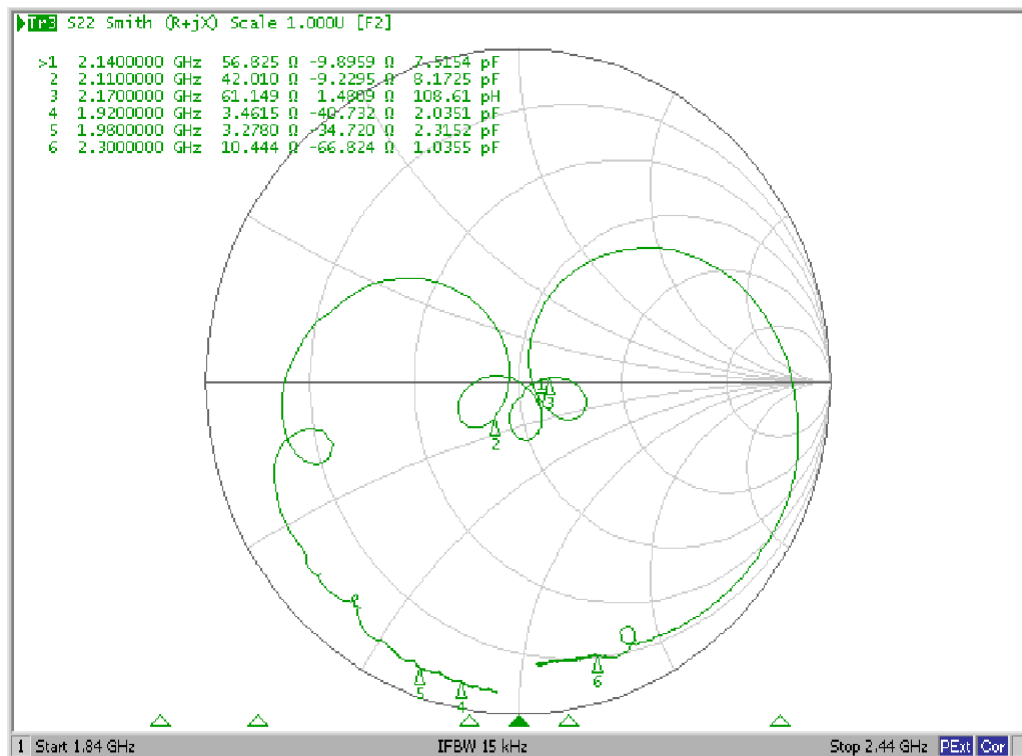
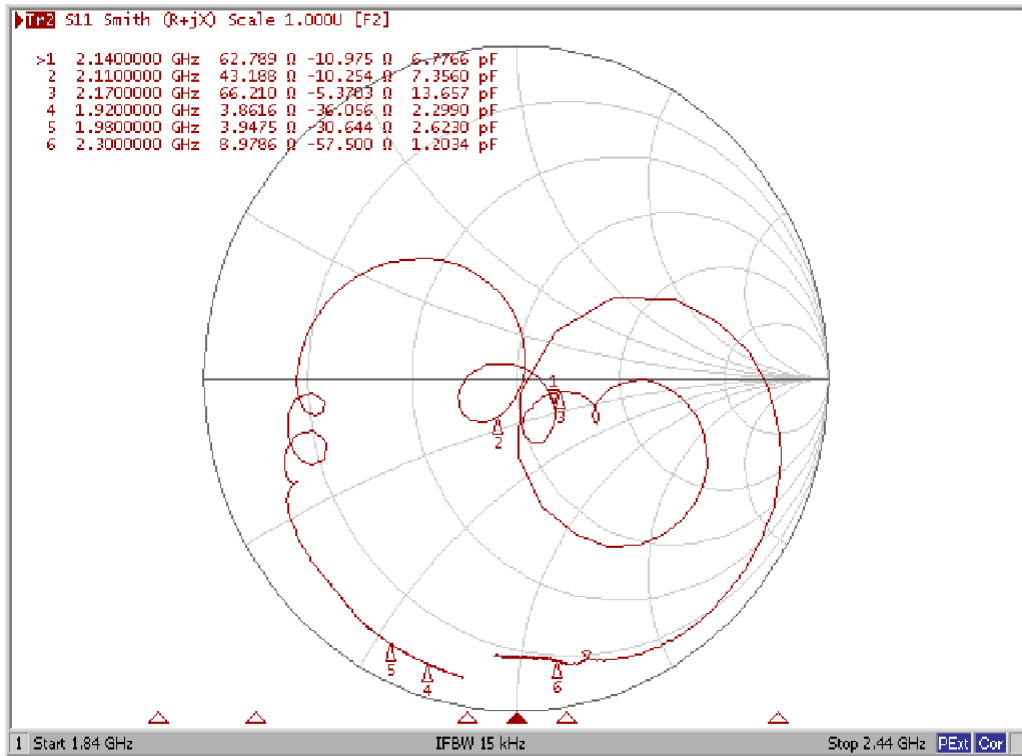
VSWR



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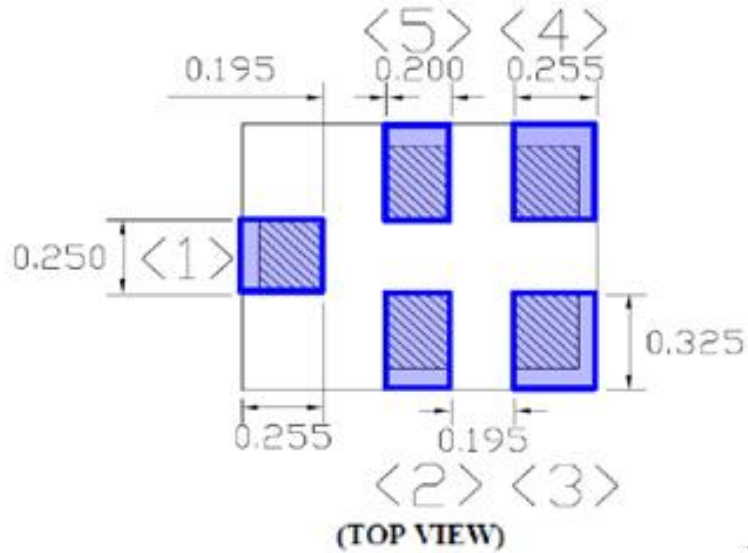
Smith Chart



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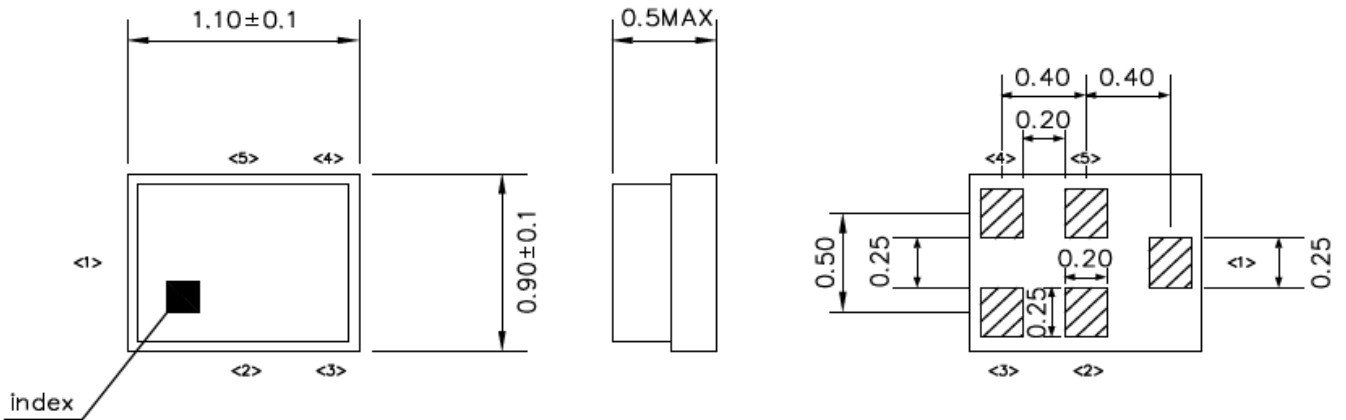
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E. PCB FOOTPRINT:



F. OUTLINE DRAWING:

Device size: 1.1typ. x 0.9typ. x 0.5max.



Unit : mm

1. Pin configuration

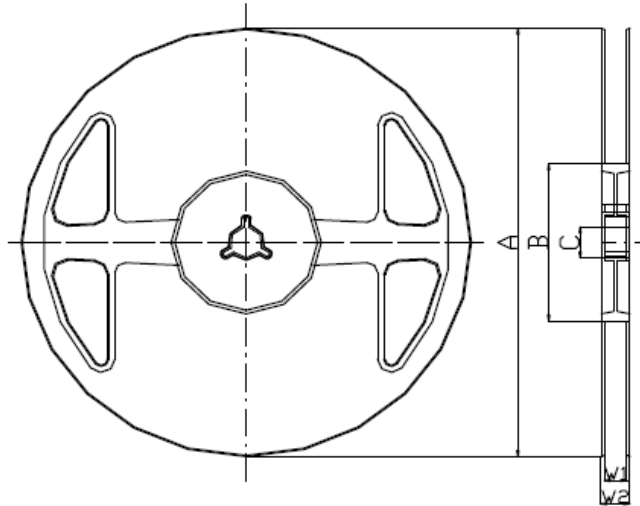
Pin No.	Symbol	Function
1	IN	Unbalanced pin
2	GND	Ground
3	GND	Ground
4	OUT	Unbalanced pin
5	GND	Ground

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G. PACKING:

1. Reel dimension



Materials of Reel

Material : Polystyrene + Carbon

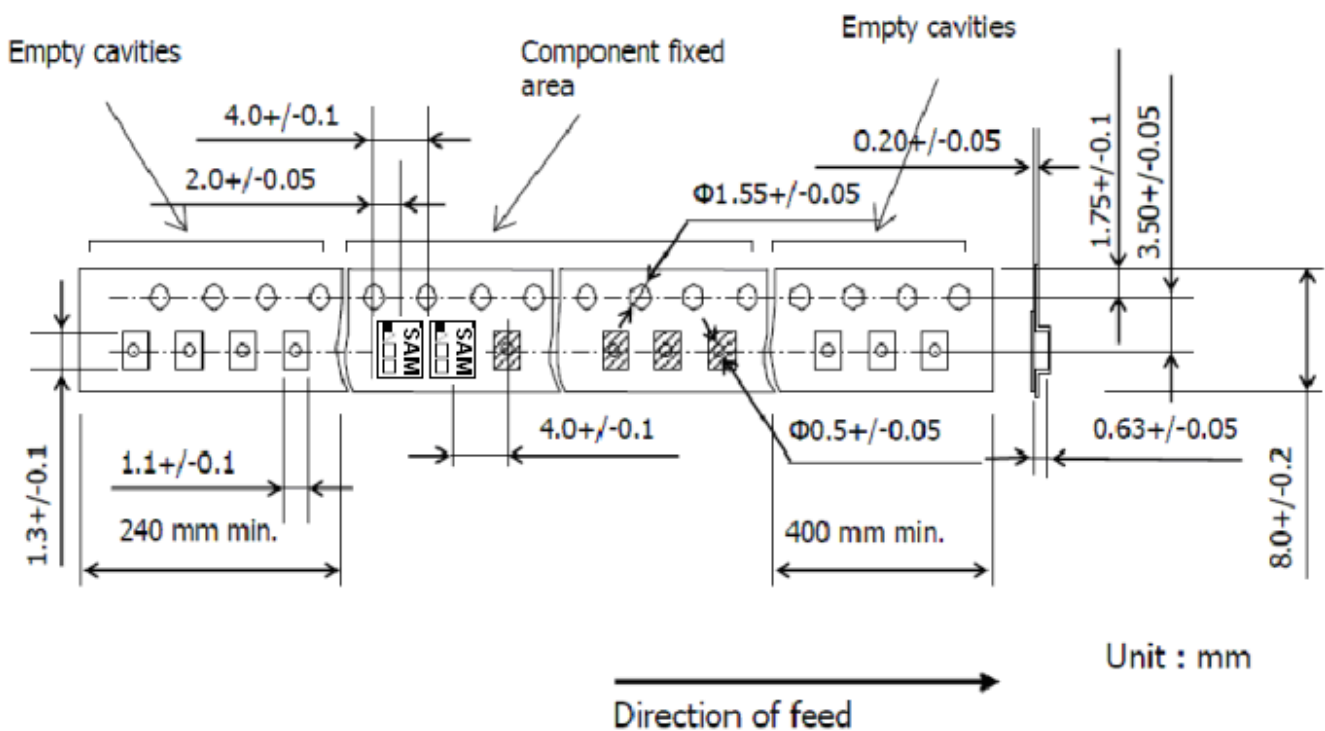
Color : Black

Surface resistance (reference value) : $10^9 \Omega/\text{sq}$ Max.

Unit : mm

Code	Quantity	A	B	C	W1	W2
J	5,000 pcs	$\phi 180.0 +0.0/-1.5$	$\phi 66.0 +/-0.5$	$\phi 13.0 +/-0.2$	$9.0 +1.0/-0.0$	$11.4 +/-1.0$

2. Tape dimension



Unit : mm

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H. Recommended Reflow Profile:

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C+0/-5°C peak (20~40sec).
4. Time: 2 times.

