SAW Filter 881.5 MHz

MODEL NO.: TA1811A REV. No.: 3.0

A. MAXIMUM RATING:

RoHS Compliant

Lead-free soldering

1. Maximum Input Power: 10 dBm
2. DC voltage: 0 V
3. Operating Temperature: -30 ℃ to +85 ℃
4. Storage Temperature: -40 ℃ to +85 ℃
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD: 100 V(MM), 200 V(HBM)

Electrostatic **S**ensitive **D**evice (**ESD**)

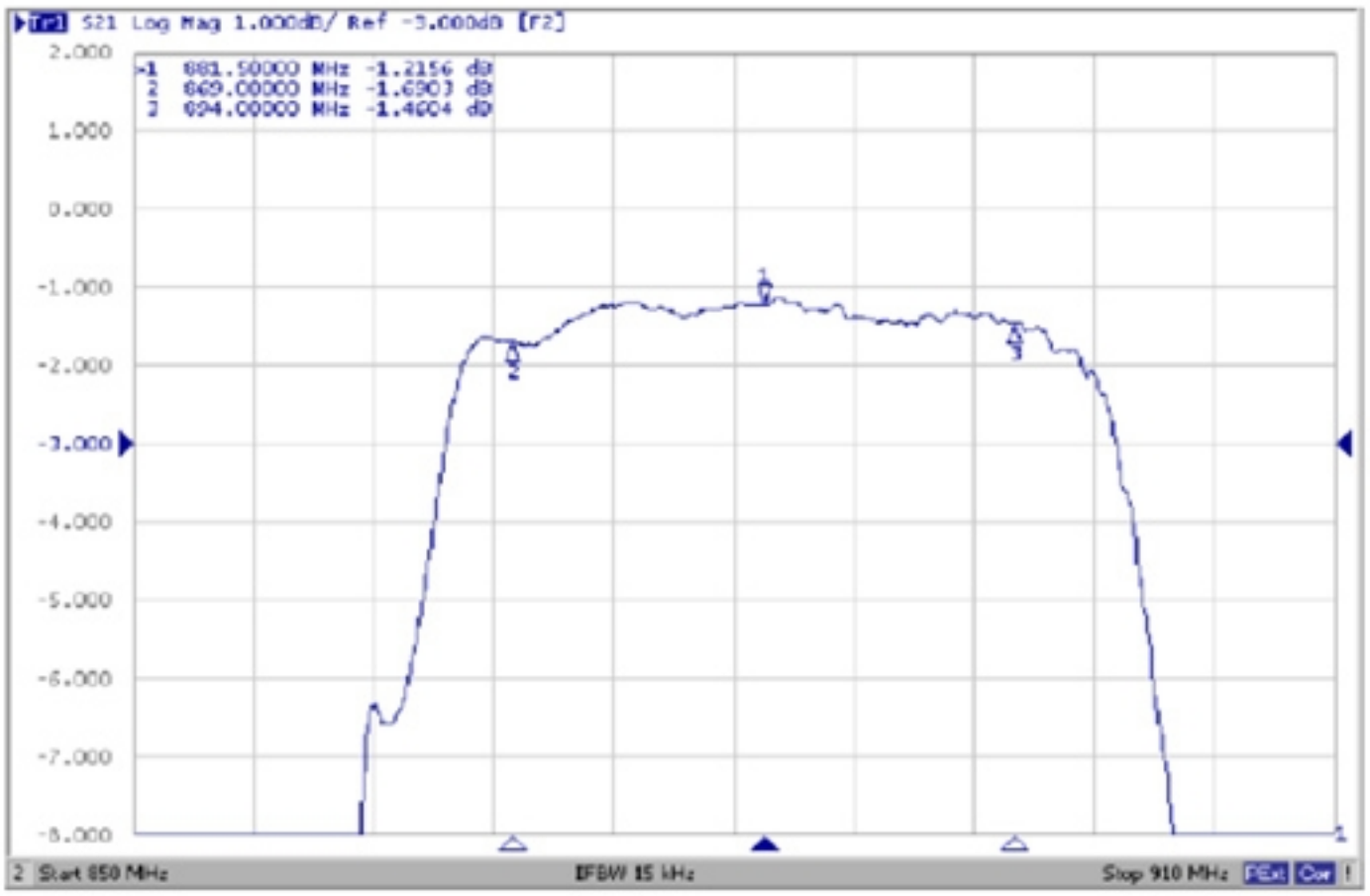
B. ELECTRICAL CHARACTERISTICS:

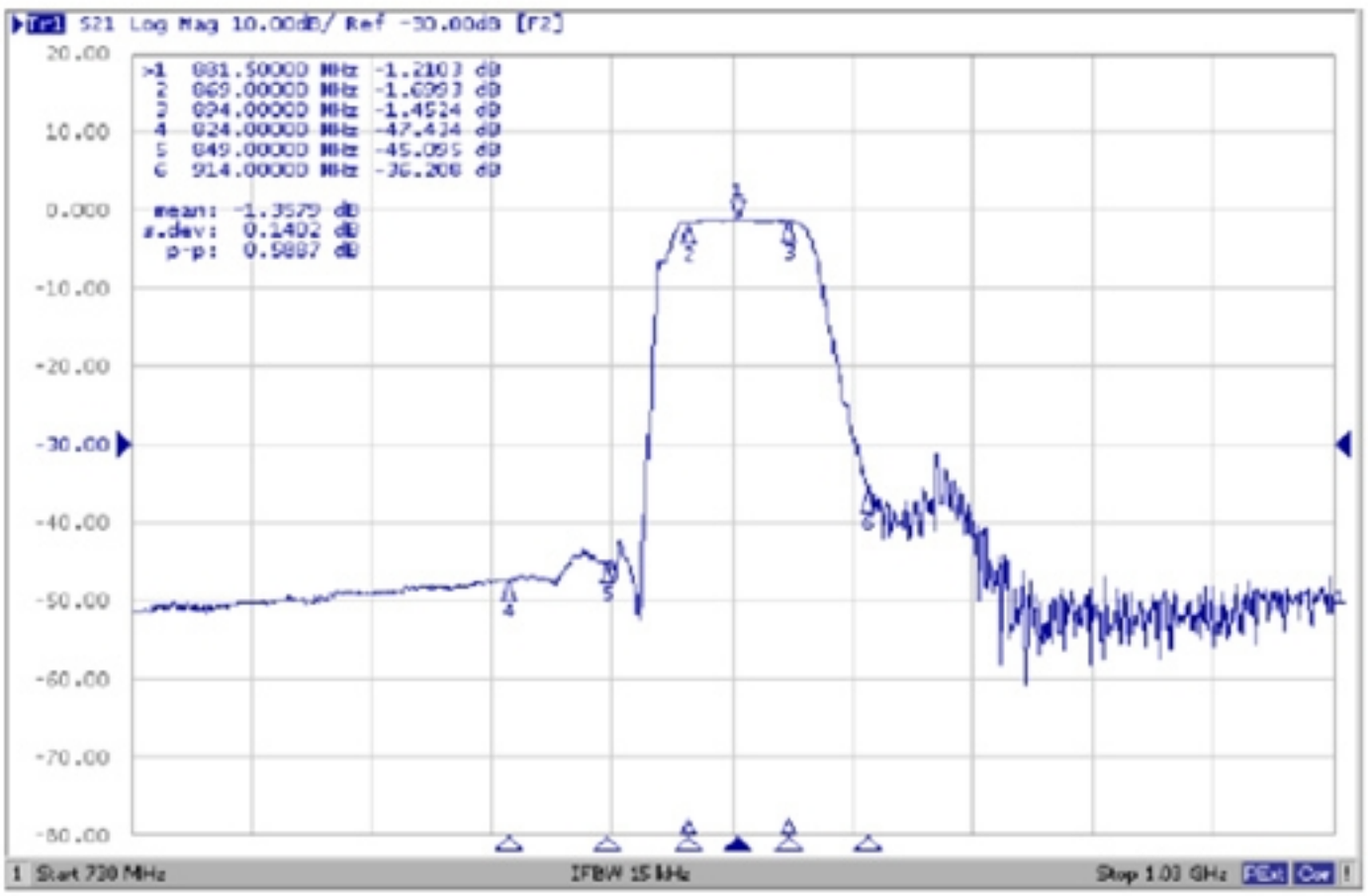
Terminating source impedance: Zs = 50 Ω

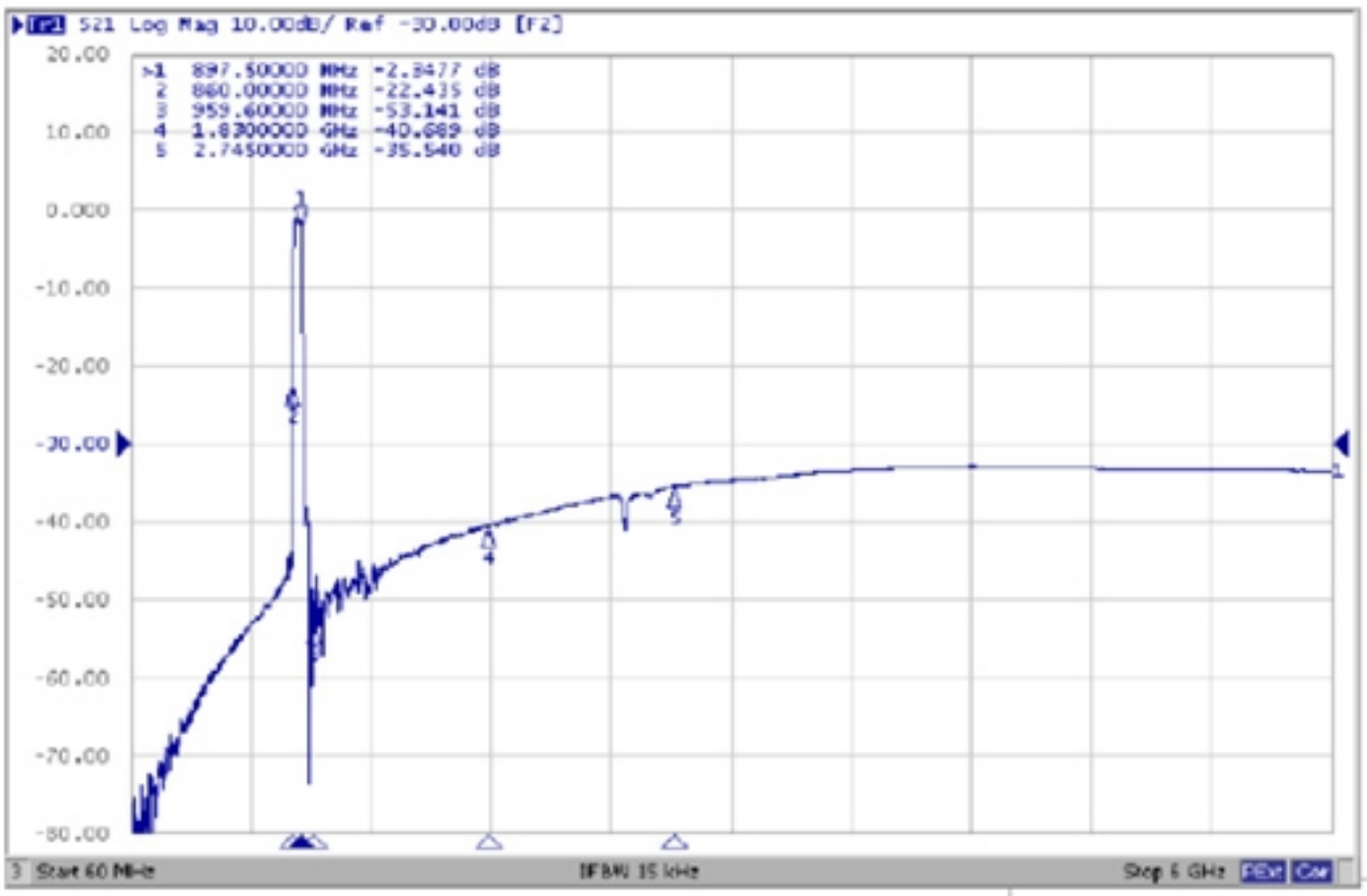
Terminating load impedance: Z_L = 50 Ω

Item		Unit	Min.	Typ.	Max.
Center Frequency	**Fc**	MHz	-	881.5	-
Insertion Loss (869~894 MHz)	**IL**	dB	-	1.6	2.3
Amplitude Ripple (869~894 MHz)		dB_{p-p}	-	0.4	1.3
VSWR (869~894 MHz)		-	-	1.6	2.0
Attenuation (Reference level from 0 dB)					
DC ~ 824 MHz		dB	40	51	-
824 ~ 849 MHz		dB	40	46	-
914 ~ 970 MHz		dB	25	35	-
970 ~ 1049 MHz		dB	38	52	-
1049 ~ 2000 MHz		dB	33	43	-
2000 ~ 3000 MHz		dB	25	39	-
3000 ~ 6000 MHz		dB	20	36	-

C. FREQUENCY CHARACTERISTICS:

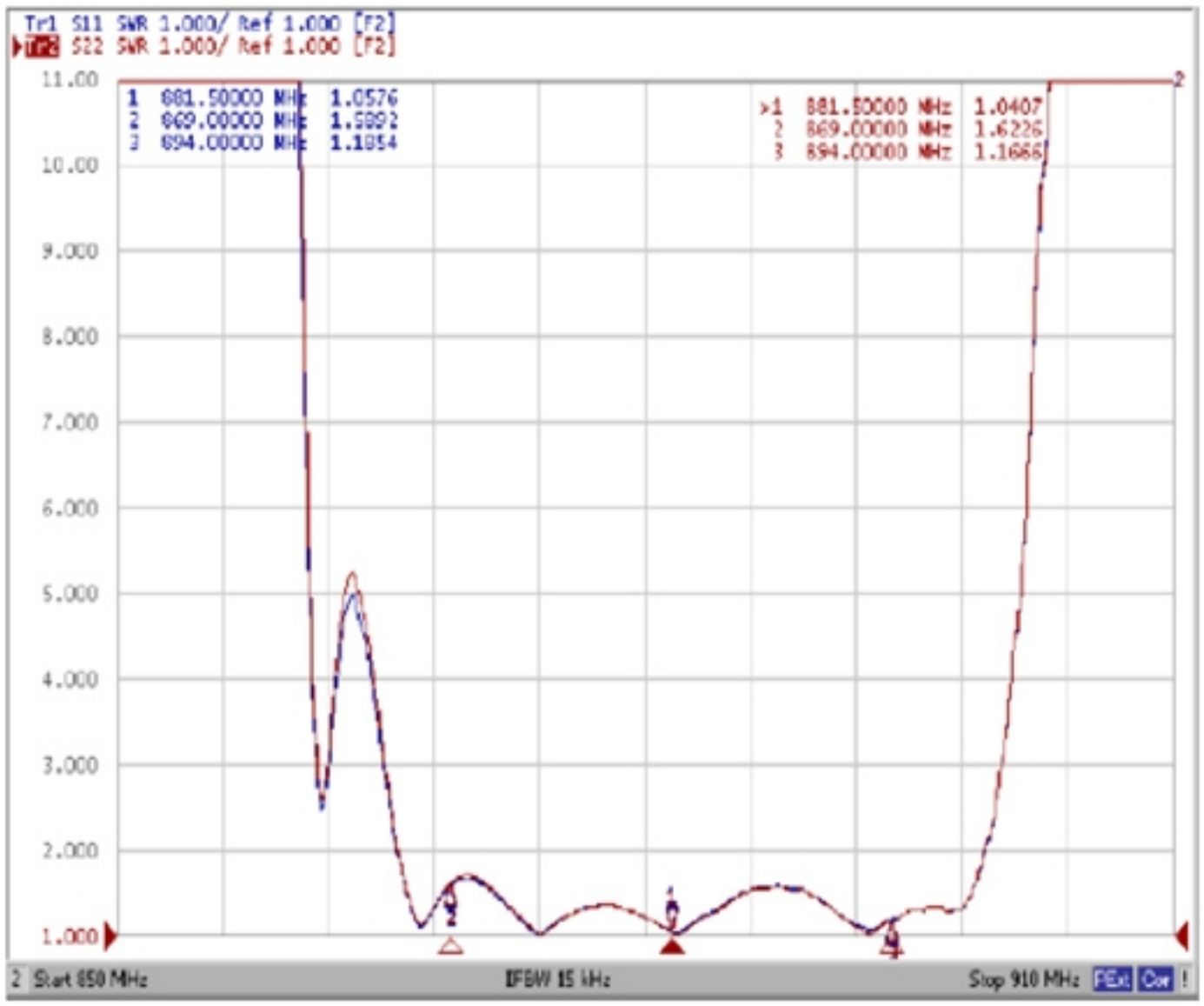




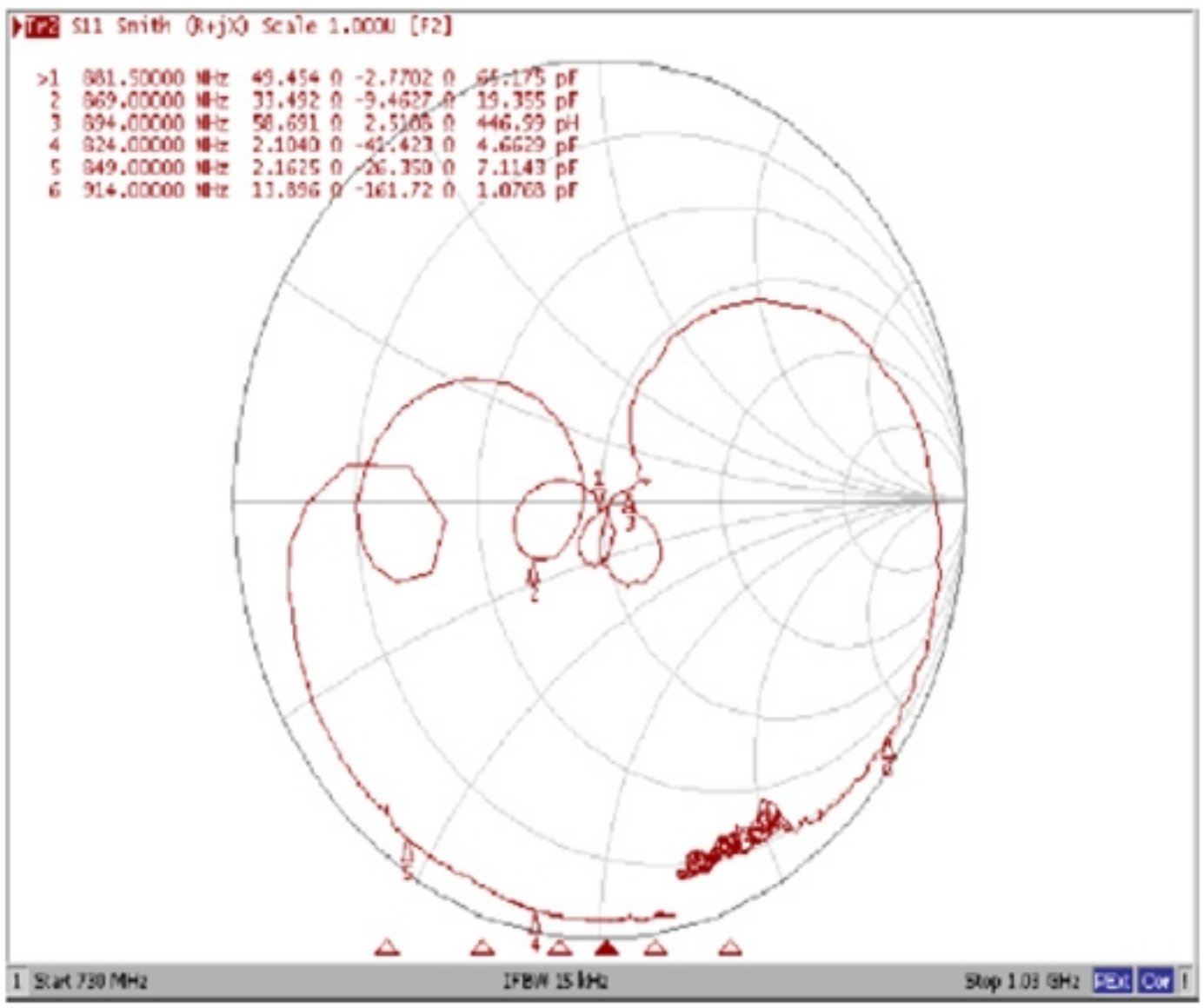


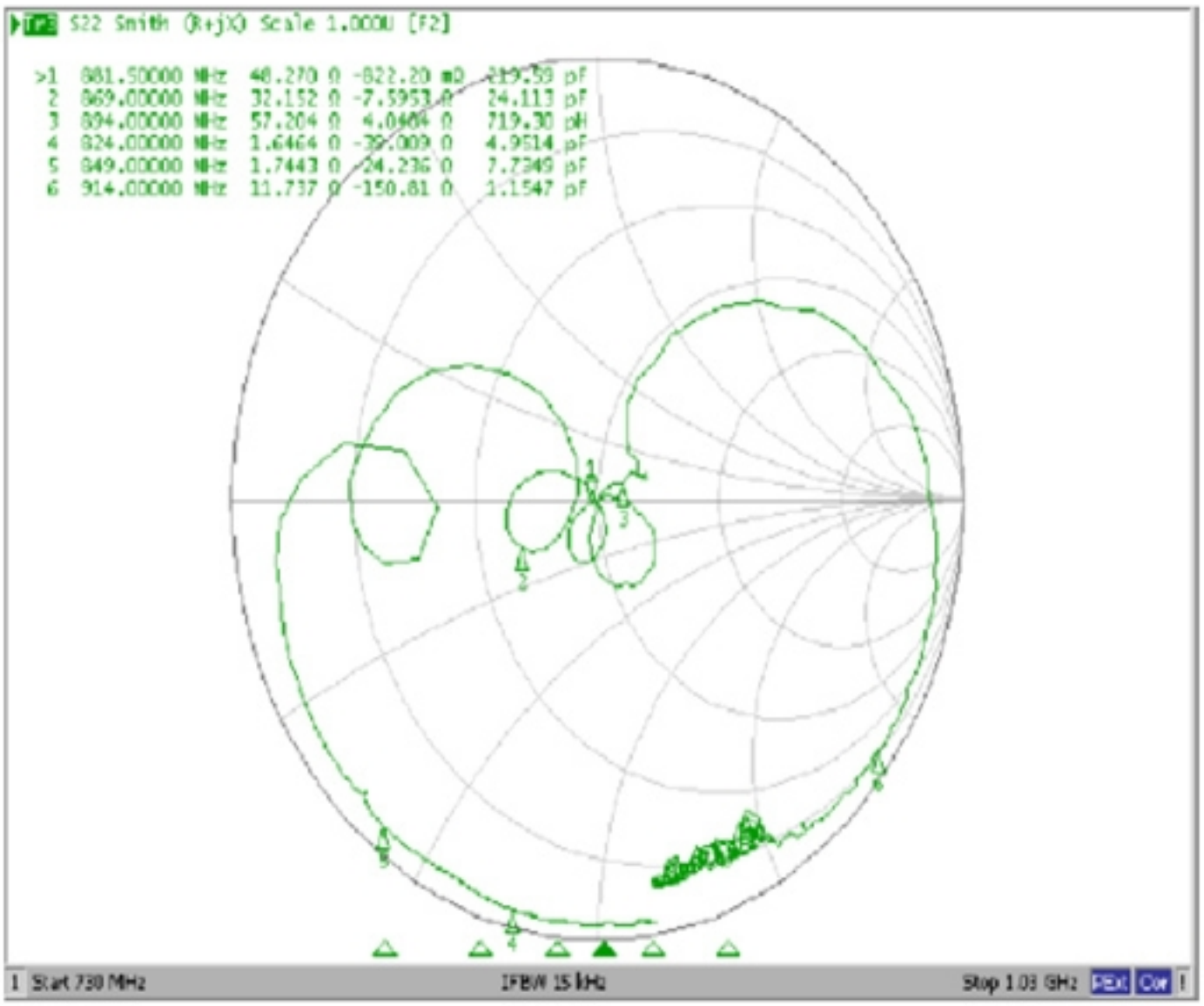
Reflection Functions:

VSWR

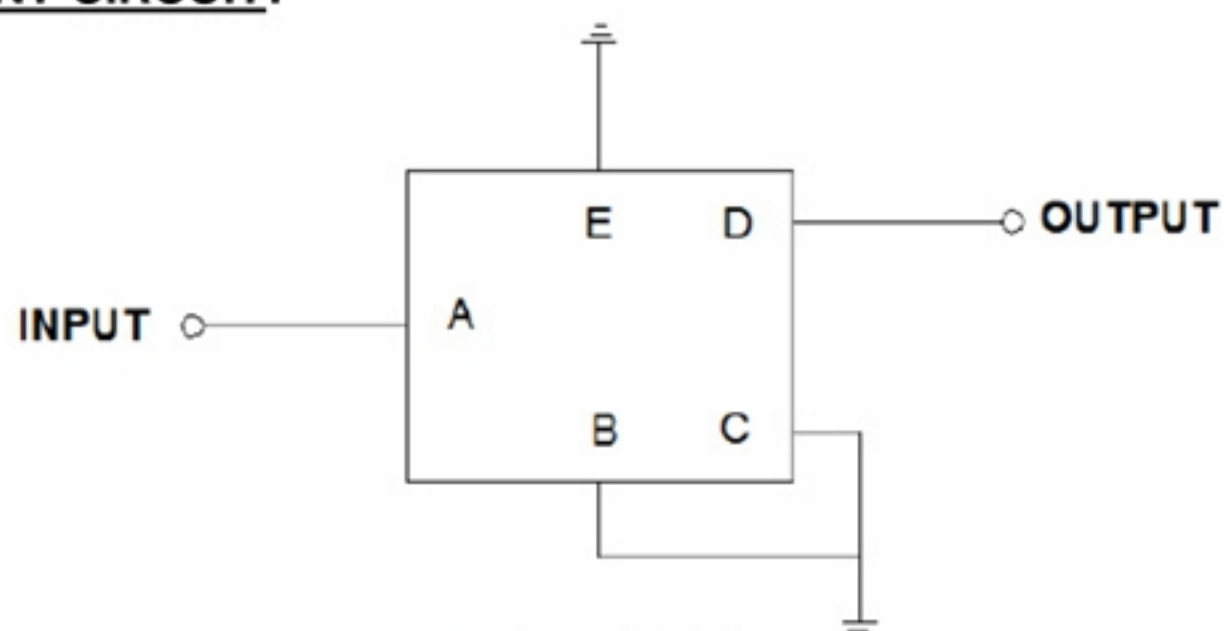


Smith Chart





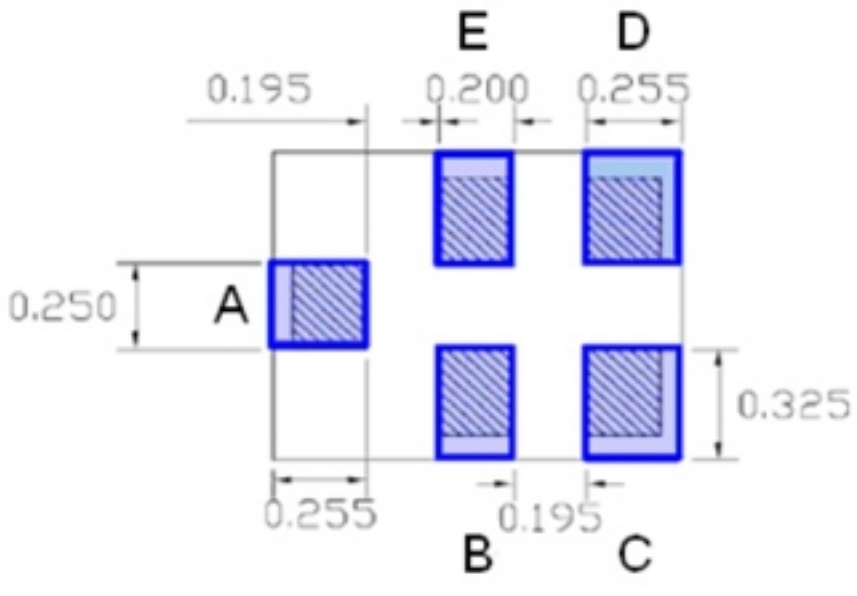
D. MEASUREMENT CIRCUIT:



Source Impedance: 50 Ω

Load Impedance: 50 Ω

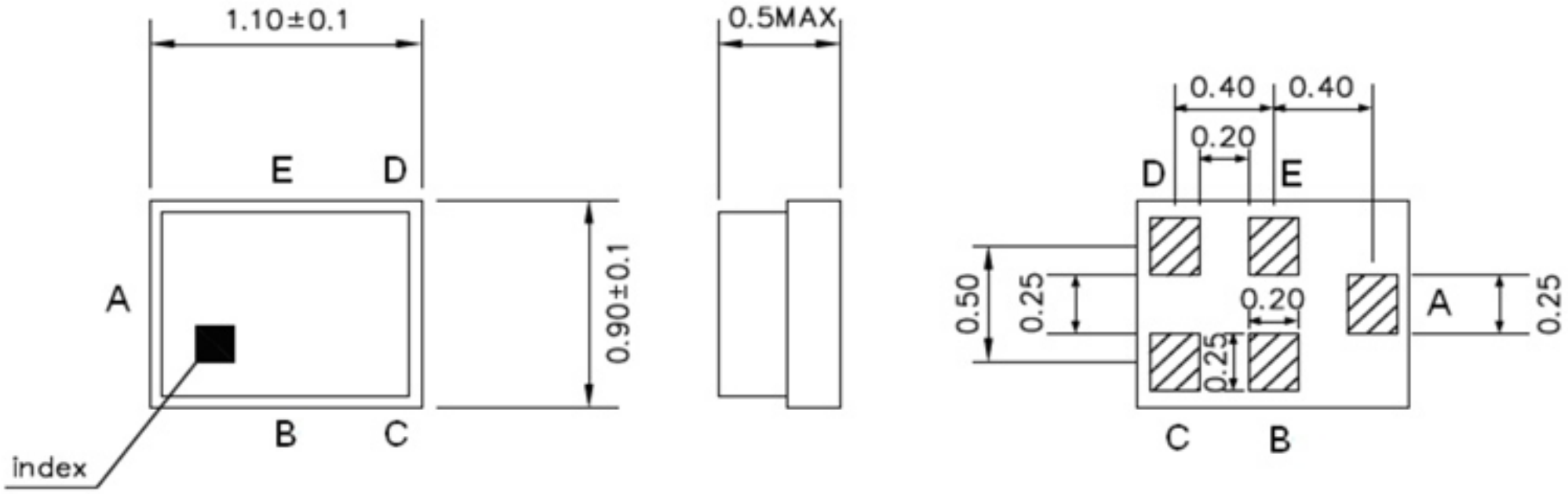
E. PCB Footprint:



(TOP VIEW)

F. OUTLINE DRAWING:

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



Unit : mm

Pin Configuration

Pin No.	Symbol	Function
A	IN	Unbalanced input
B	GND	Ground
C	GND	Ground
D	OUT	Unbalanced output
E	GND	Ground

Top View (Sample Production):

Top View (Mass Production):

△ : **Date Code**

□ : **Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)**

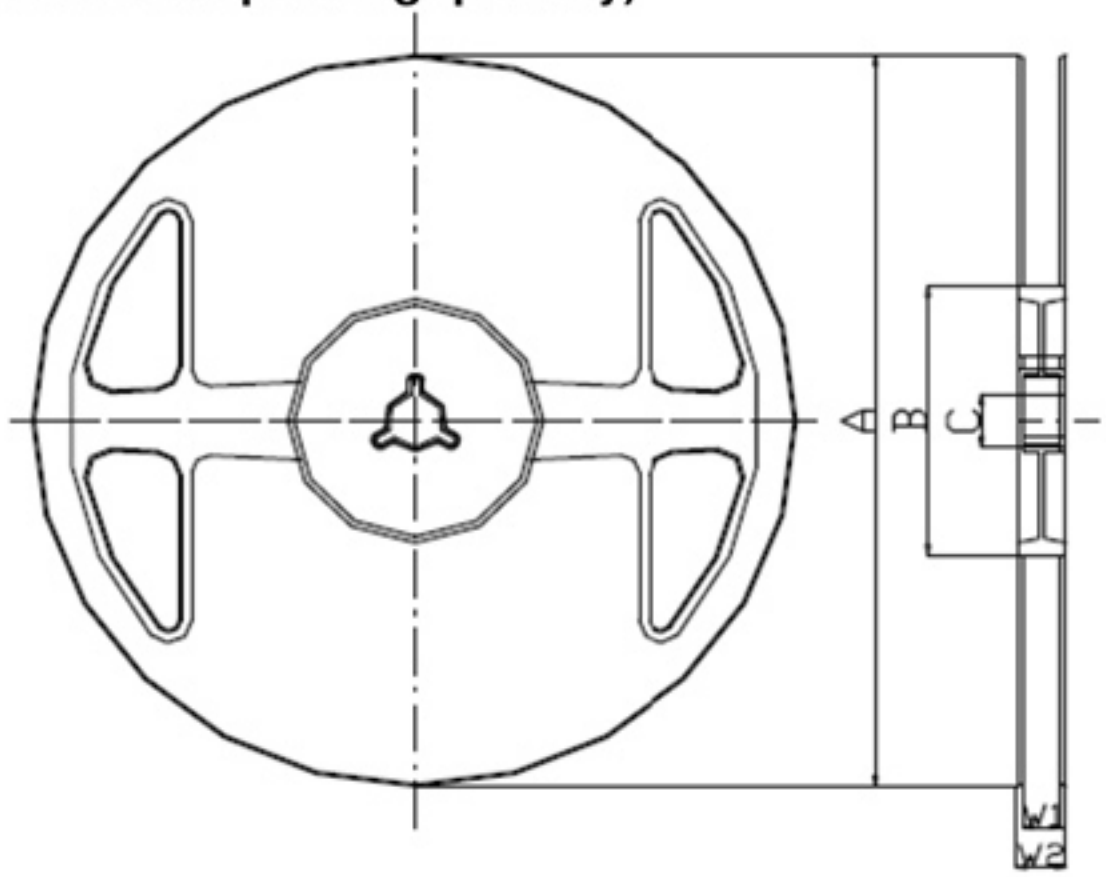
Date Code:

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2020	n	p	q	r	s	t	u	v	w	x	y	z
2021	A	B	C	D	E	F	G	H	J	K	L	M
2022	N	P	Q	R	S	T	U	V	W	X	Y	Z
2023	a	b	c	d	e	f	g	h	j	k	l	m

G. <u>PACKING</u>: (Ref: WI-75M03)

1. REEL DIMENSION

(Please refer to FR-75D10 for packing quantity)



Materials of Reel

Material : Polvstvrene + Carbon

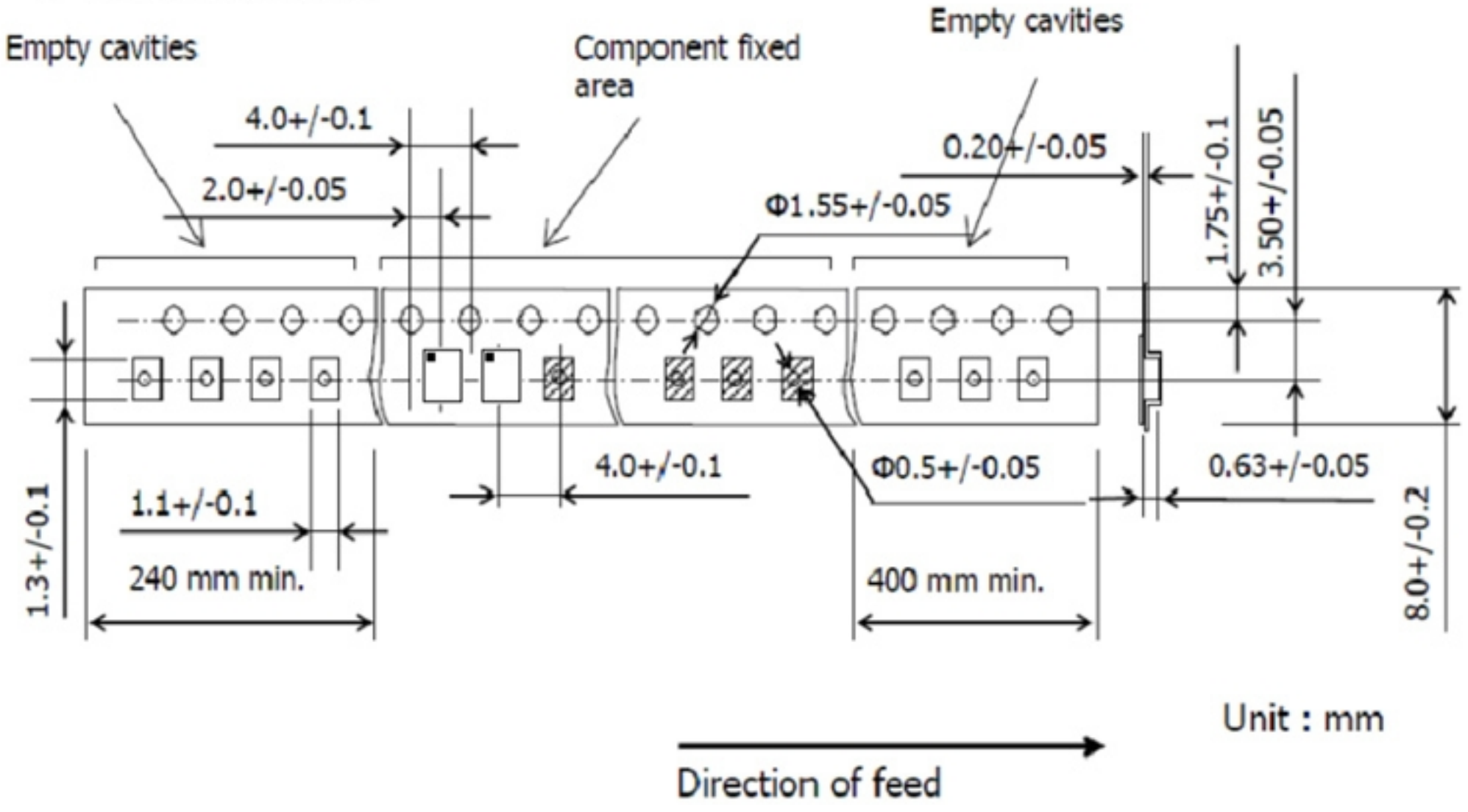
Color : Black

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

Unit : mm

A	B	C	W1	W2
ϕ 180.0 +0.0/-1.5	ϕ 66.0 +/-0.5	ϕ 13.0 +/-0.2	9.0 +1.0/-0.0	11.4 +/-1.0

2. TAPE DIMENSION



H. <u>Recommended Reflow Profile:</u>

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