

# SAW Filter 787.5 MHz

MODEL NO.: TA0823A

REV. NO.:2

## A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC voltage: 5 V
3. Operating Temperature: -30°C to +70°C
4. Storage Temperature: -40°C to +85°C
5. Moisture Sensitivity Level: Level 1 (**MSL1**)
6. ESD 100V(MM) 200V(HBM)

RoHS Compliant  
Lead free  
Lead-free soldering

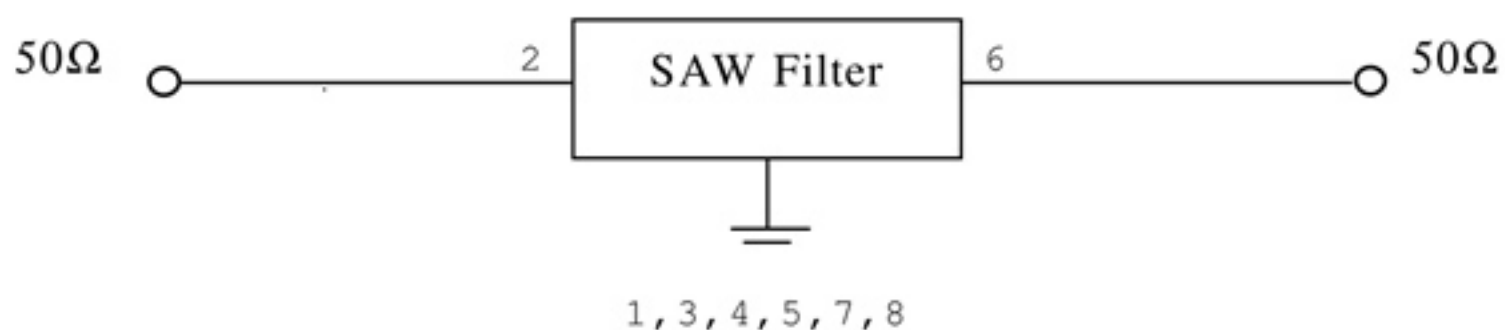
Electrostatic Sensitive Device (**ESD**)

## B. ELECTRICAL CHARACTERISTICS:

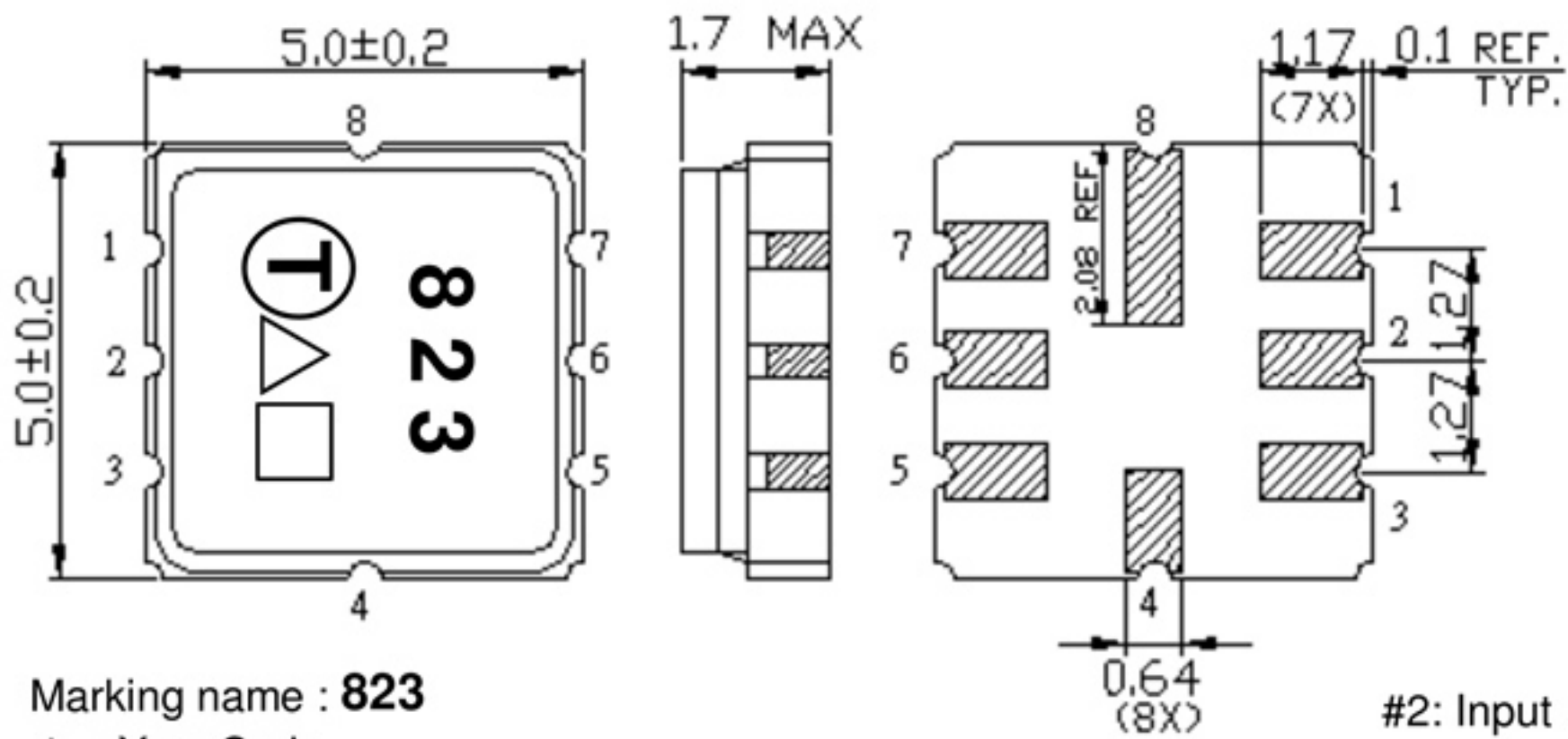
Item		Unit	Min.	Typ.	Max.
Center frequency	Fo	MHz	-	787.5	-
Insertion loss (787~788MHz)	IL	dB	-	2.4	5
Amplitude ripple (787~788MHz)		dB	-	0.3	1.5
Return loss (787~788MHz)		dB	10	16	-
Group delay variation (787~788MHz)		ns	-	10	50
<b>Attenuation</b> (Reference level from 0 dB)					
DC~737 MHz		dB	40	43	-
757~758 MHz		dB	40	43	-
764~776 MHz		dB	15	40	-
794~806 MHz		dB	10	29	-
828~2000 MHz		dB	40	48	-
Source impedance	Zs	Ω	-	50	-
Load impedance	ZL	Ω	-	50	-
Temperature Coefficient		ppm/°C	-	-36	-

## C. MEASUREMENT CIRCUIT:

HP Network analyzer



**D. OUTLINE DRAWING:**



Marking name : **823**

△ : Year Code

□ : Date Code (Follow the table from planner each year)

Product Year Code

Year	2017	2018	2019	2020
	2021	2022	2023	2024
Year Code	A	a	<u>A</u>	<u>a</u>

#2: Input

#6: Output

#1,3,5,7: Ground

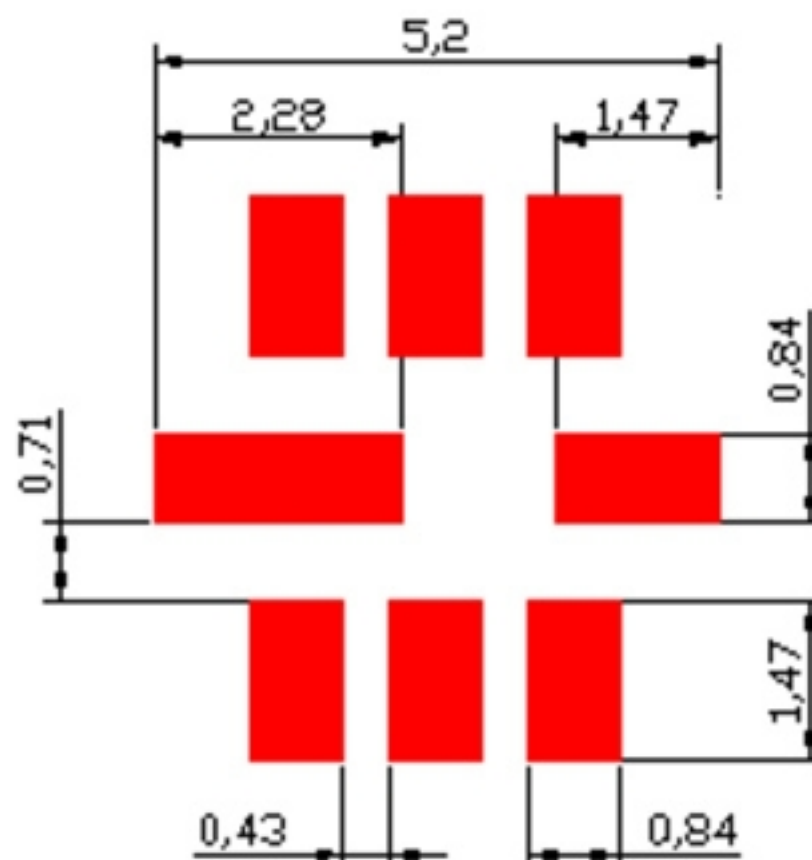
#4,8: Case Ground

Unit: mm

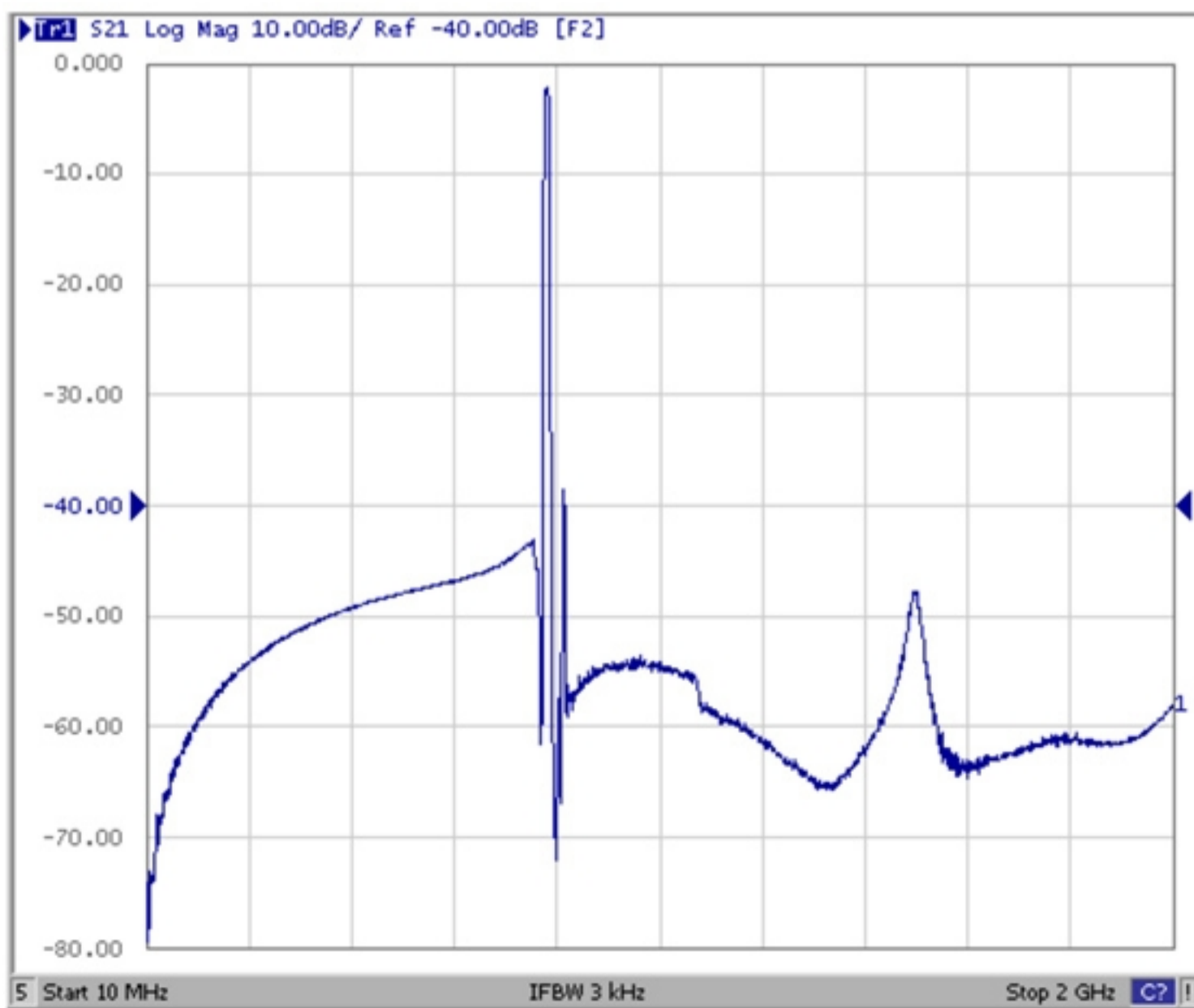
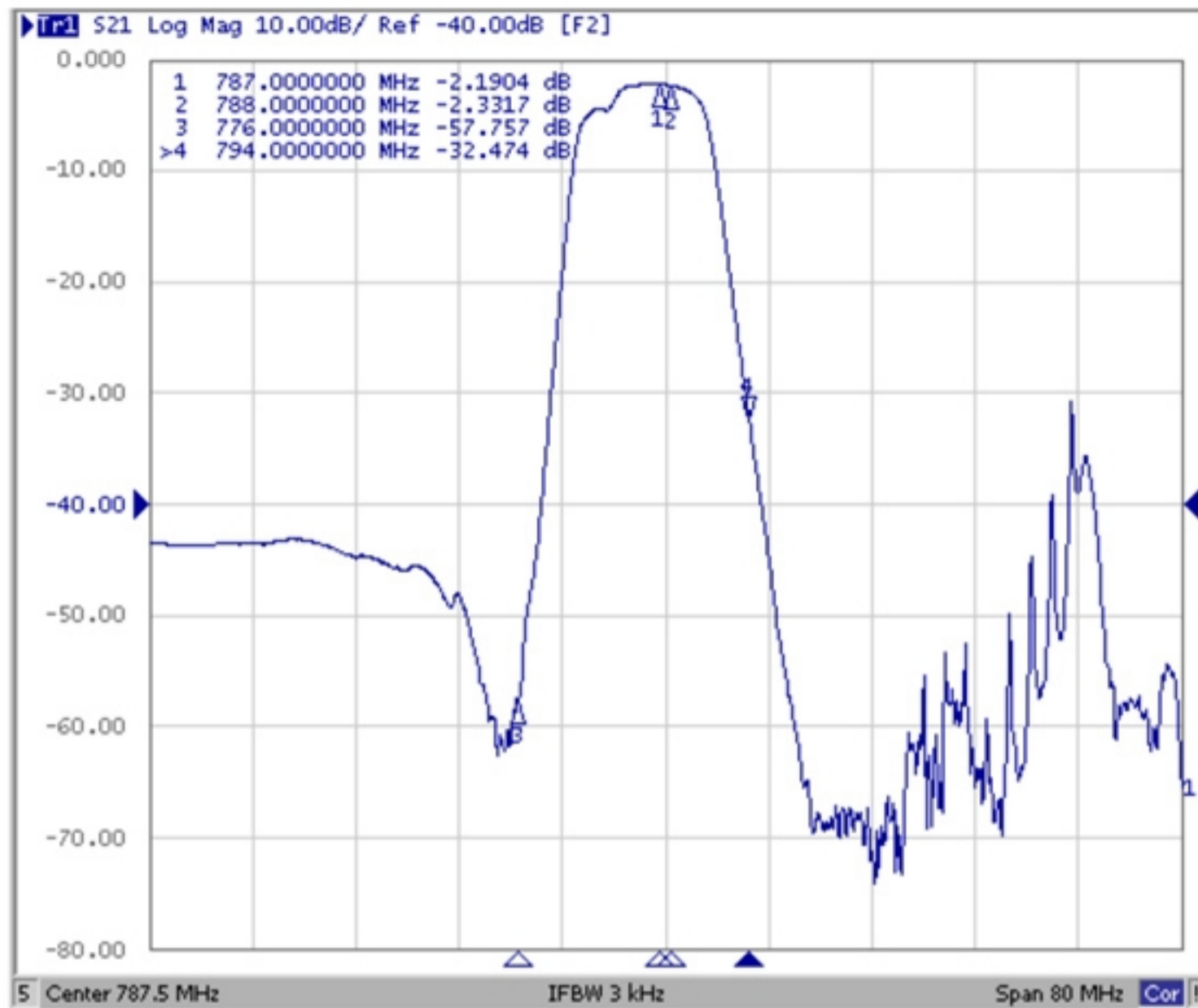
**Date Code Table**

WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

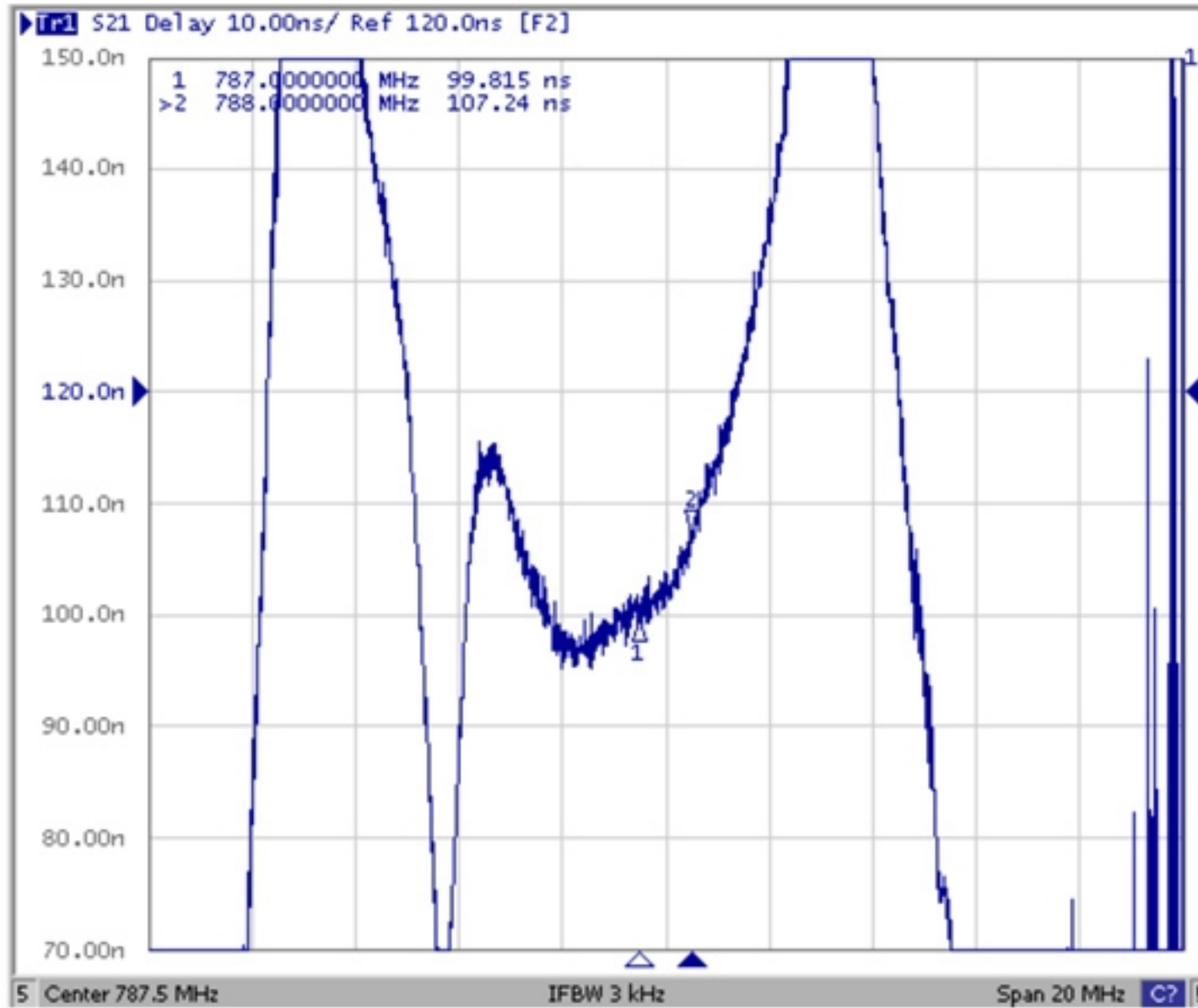
**E. PCB Footprint:**



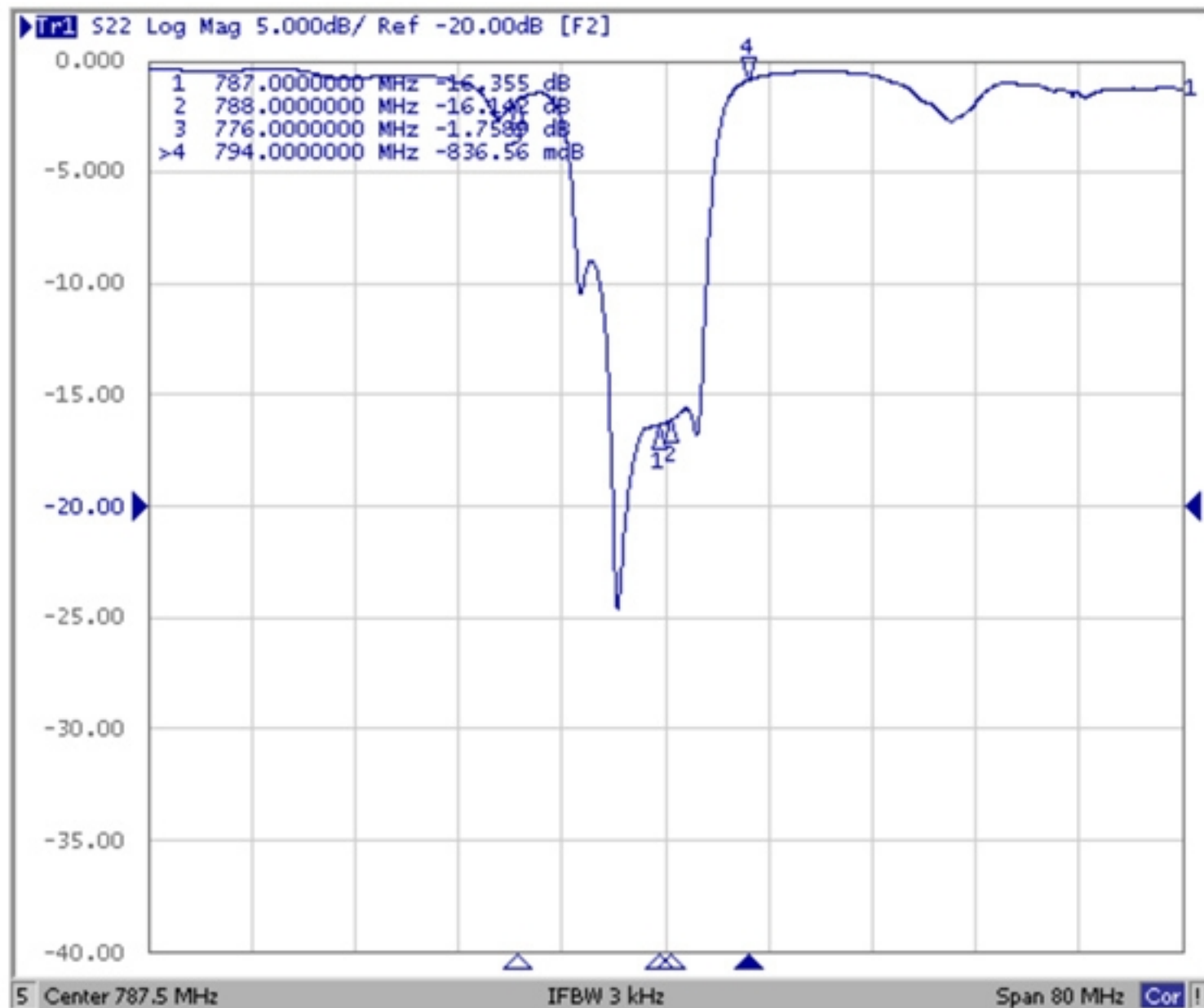
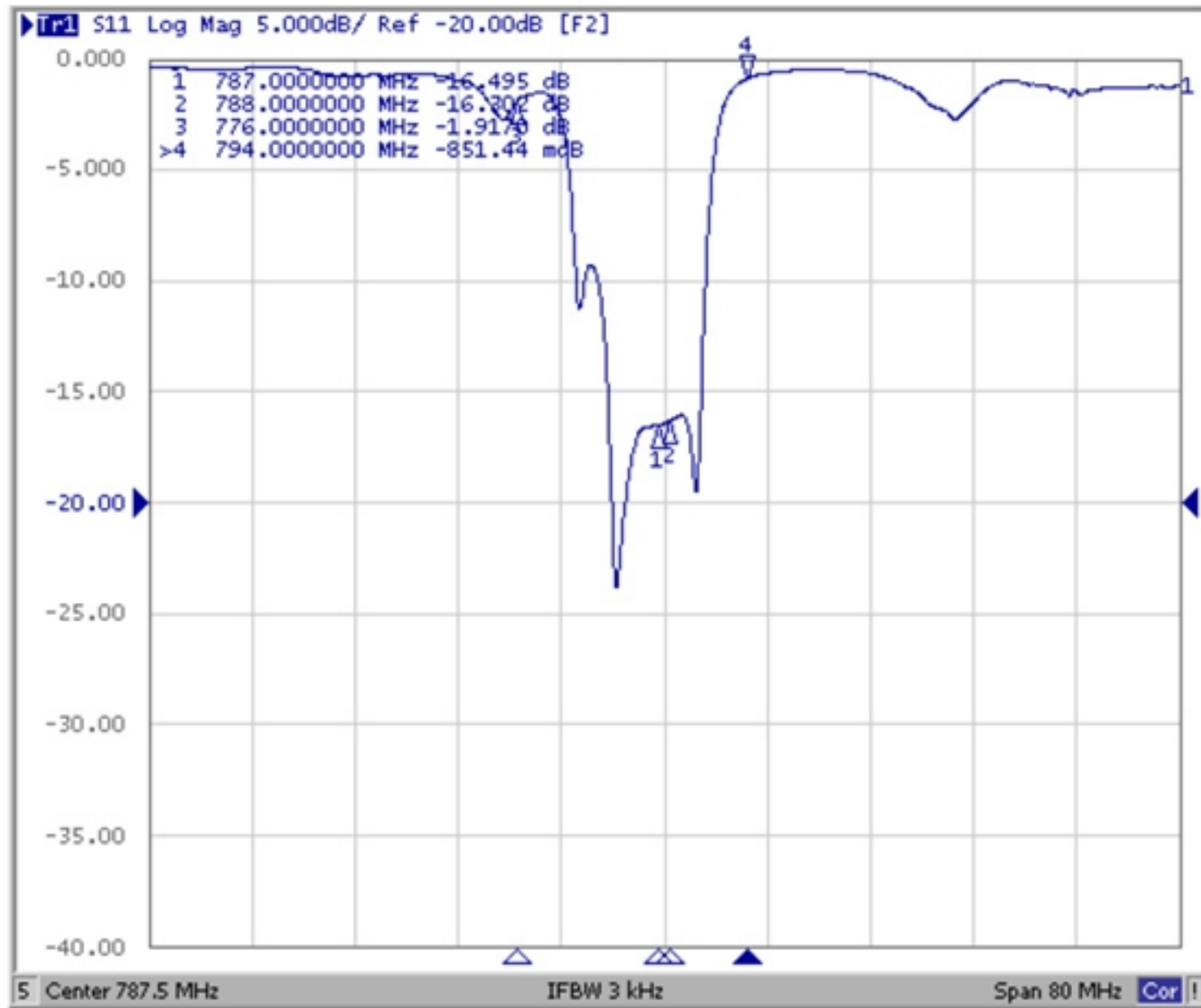
## F. Frequency Characteristics : Transfer function



## Group Delay



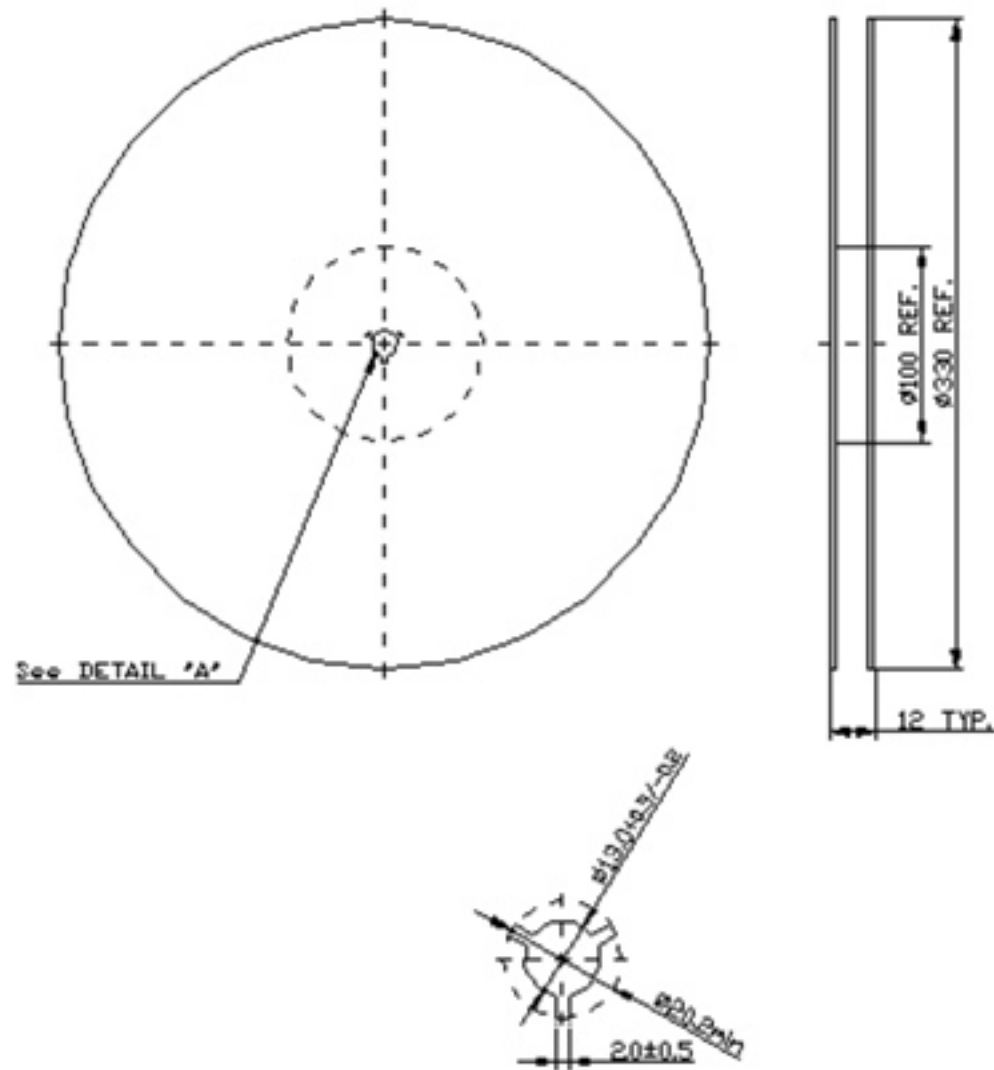
## Reflection Functions :



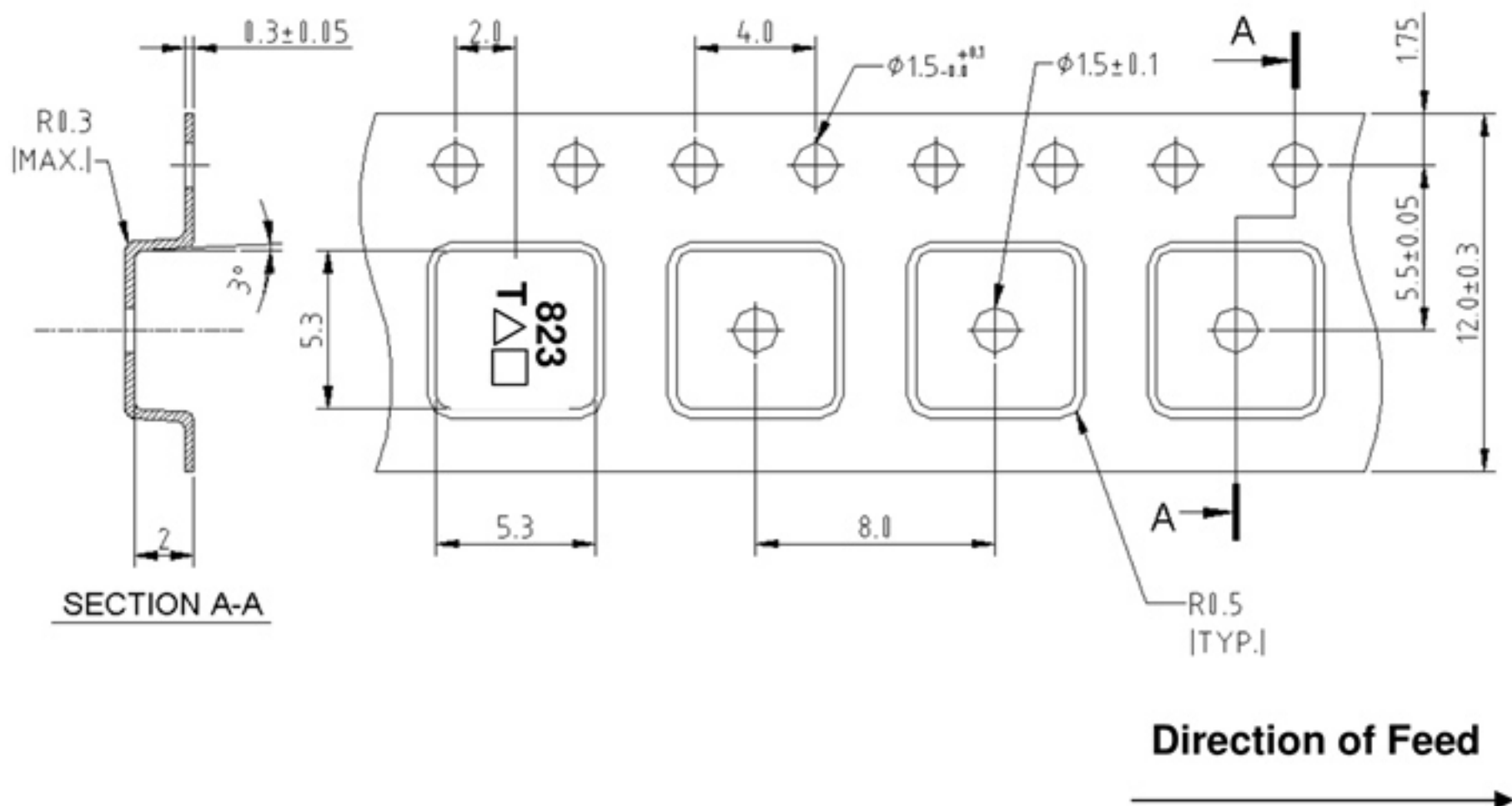
## G. PACKING:

### 1. REEL DIMENSION

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



### 2. TAPE DIMENSION



### 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.

