

SAW Filter 840.8 MHz

MODEL NO.:TA2590A

REV. NO : 1.0

A. MAXIMUM RATING:

1. Input Power Level: 10dBm
2. DC Voltage : 6V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

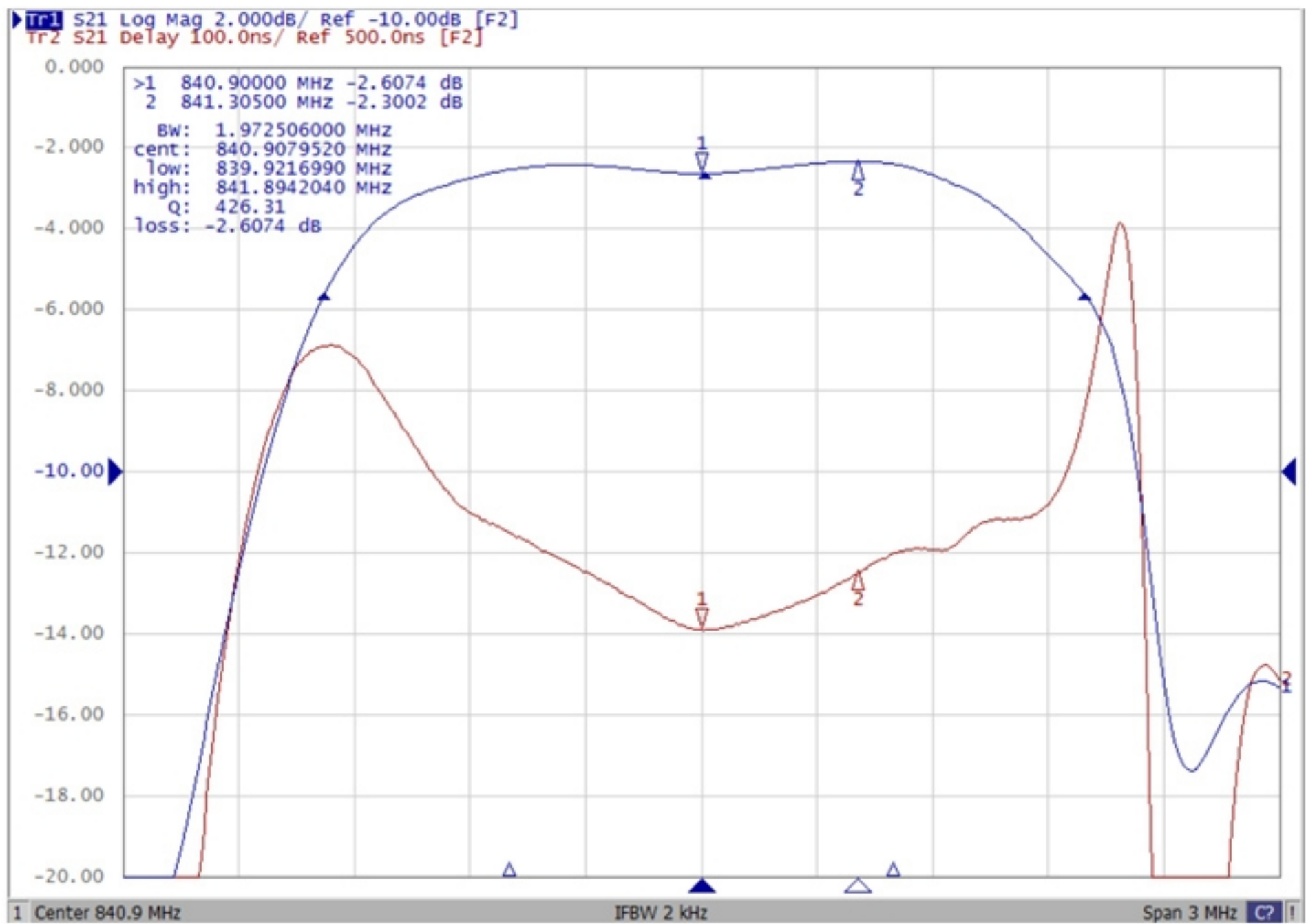
B. ELECTRICAL CHARACTERISTICS:

Ambient Temperature: 25 °C

Item	Unit	Min.	Typ.	Max.	
Center frequency F_c	MHz	840.7	840.8	840.9	
3dB BW	MHz	1.5	1.9	-	
20dB BW	MHz	-	3.8	-	
Minimum insertion loss IL(min) Incl. loss of matching elements *1)	dB	-	2.3	3.7	
Passband (relative to IL_{min}) *1) 840.05 ~ 841.55 MHz	dB	-	0.3	3.0	
Attenuation (relative to IL_{min}) *1)					
15.000 ~ 758.80	MHz	dB	41	45	-
758.80 ~ 821.80	MHz	dB	34	38	-
821.80 ~ 828.80	MHz	dB	32	36	-
828.80 ~ 837.80	MHz	dB	16	25	-
839.00	MHz	dB	18	24	-
844.10 ~ 849.00	MHz	dB	16	22	-
849.00 ~ 866.40	MHz	dB	20	25	-
866.40 ~ 881.80	MHz	dB	36	39	-
881.80 ~ 1000.0	MHz	dB	39	42	-
1000.0 ~ 2000.0	MHz	dB	40	53	-
2000.0 ~ 2500.0	MHz	dB	55	67	-
Impedance at F _c ,Input *1)Z _{in} = R _{in} //C _{in} Z _s	Ω		485Ω//1.5pF		
Impedance at F _c ,Output *1)Z _{out} = R _{out} //C _{out} Z _L	Ω		485Ω//1.5pF		

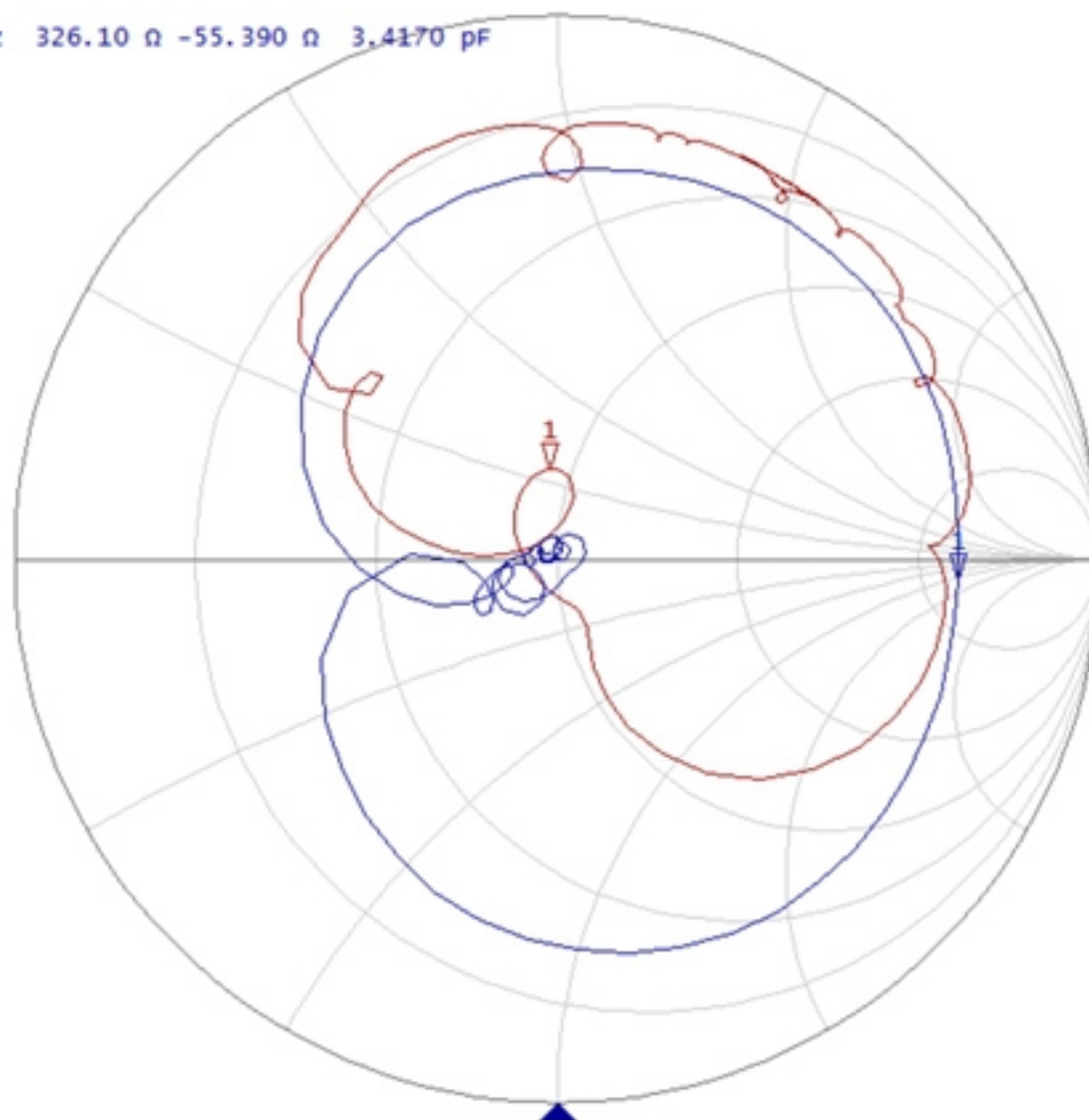
*1): The matching circuit is real by actual passive components.
0805 Coilcraft CS series conductor is used for inductor.
0402 muRata GRM series is used for capacitor.

C. FREQUENCY CHARACTERISTICS:



▶ Tr1 S21 Smith (R+jX) Scale 1.000U [F2]
Tr2 S22 Smith (R+jX) Scale 1.000U [F2]

>1 840.90000 MHz 326.10 Ω -55.390 Ω 3.4170 pF

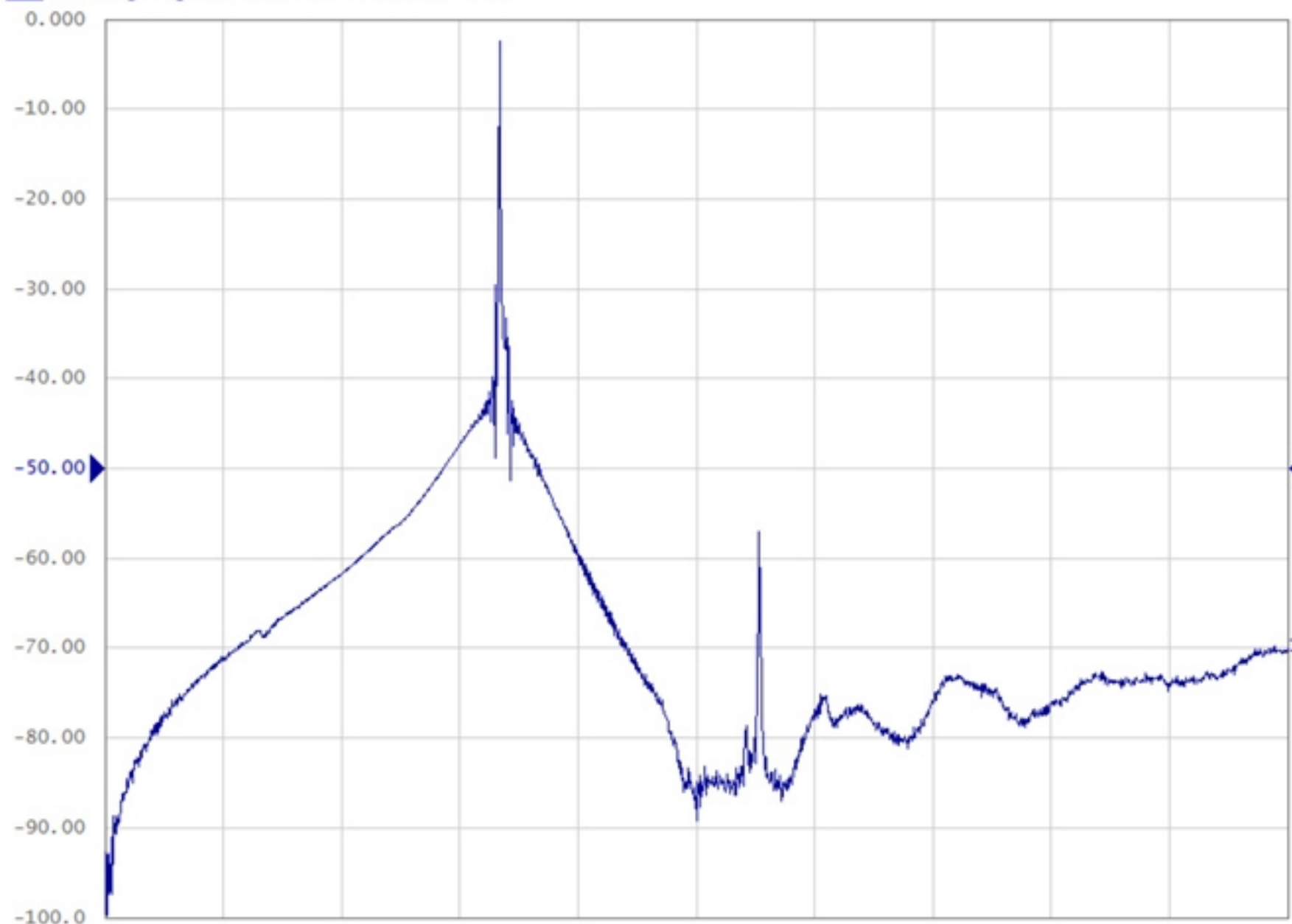


1 Center 840.9 MHz

IFBW 2 kHz

Span 20 MHz

▶ Tr1 S21 Log Mag 10.00dB/ Ref -50.00dB [F2]

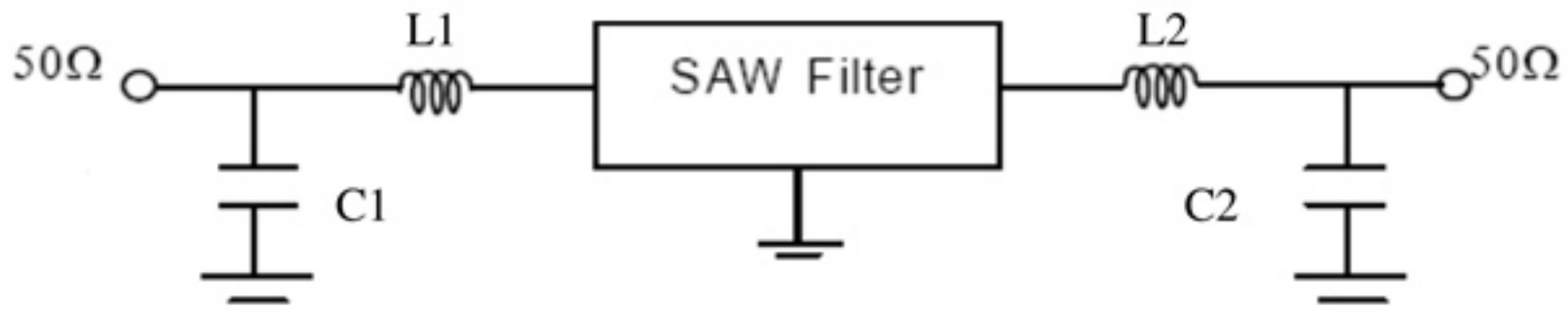


1 Start 10 MHz

IFBW 2 kHz

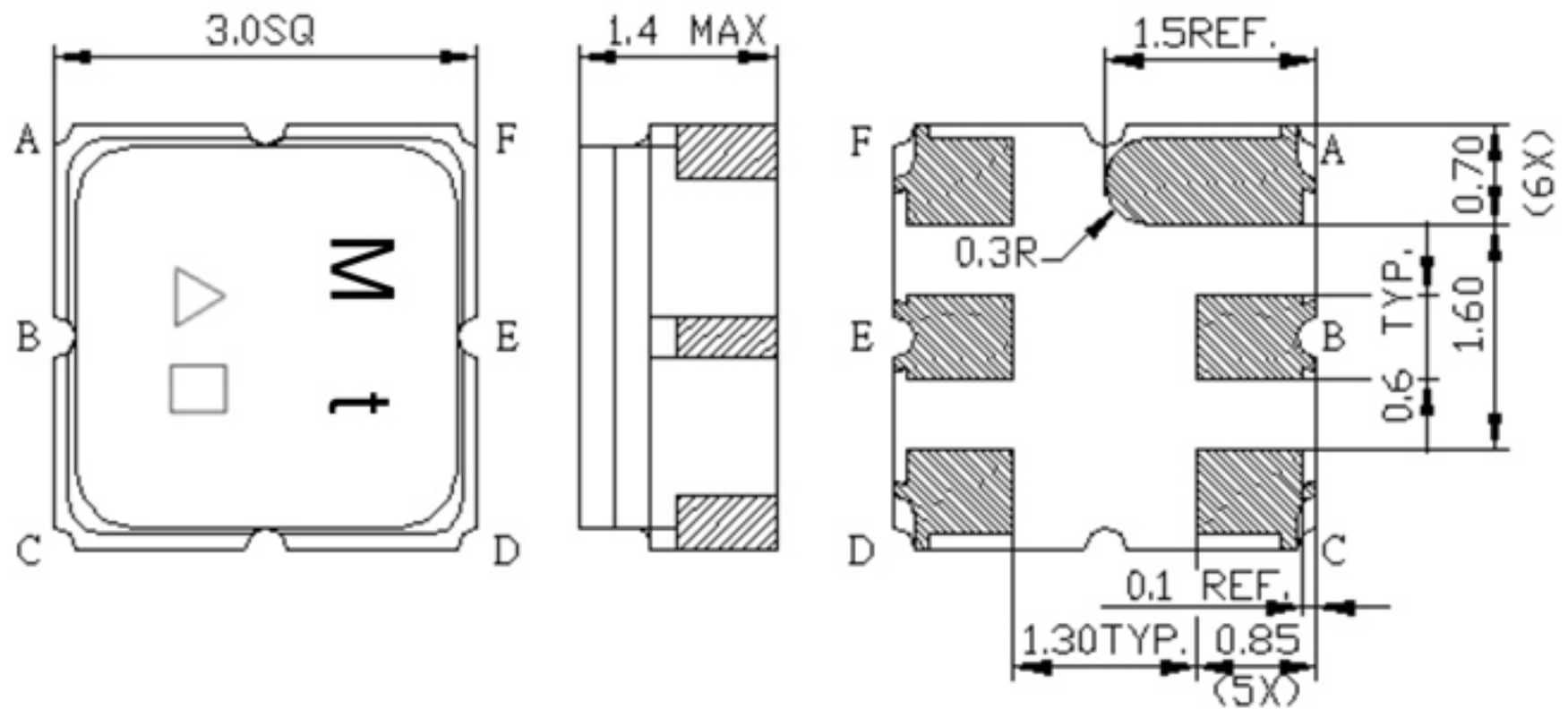
Stop 2.5 GHz

D. MEASUREMENT CIRCUIT:



L1=L2=27nH C1=C2=3pF

E. OUTLINE DRAWING:

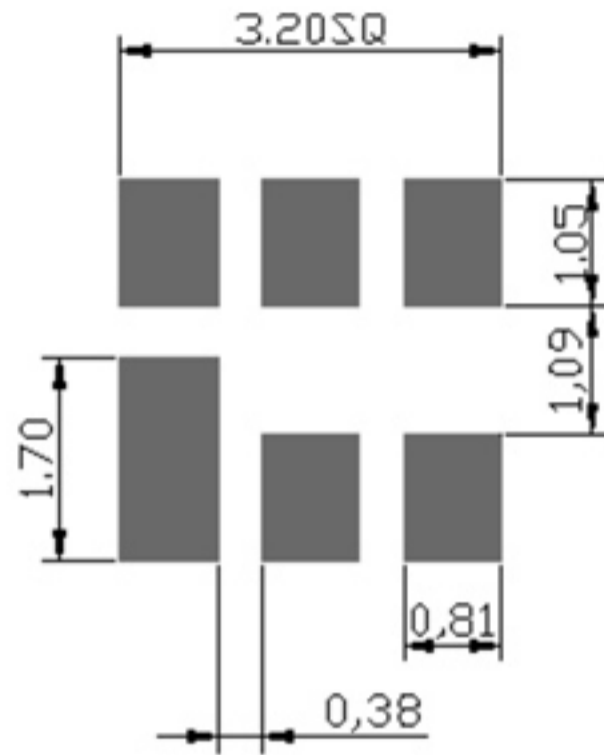


B: Input
 E: Output
 A,C,D,F: Ground
 △: Year code: 1 for 2011, 2 for 2012...0 for 2020...
 □: Date code:
 Unit: mm

□ : Data code : See the table

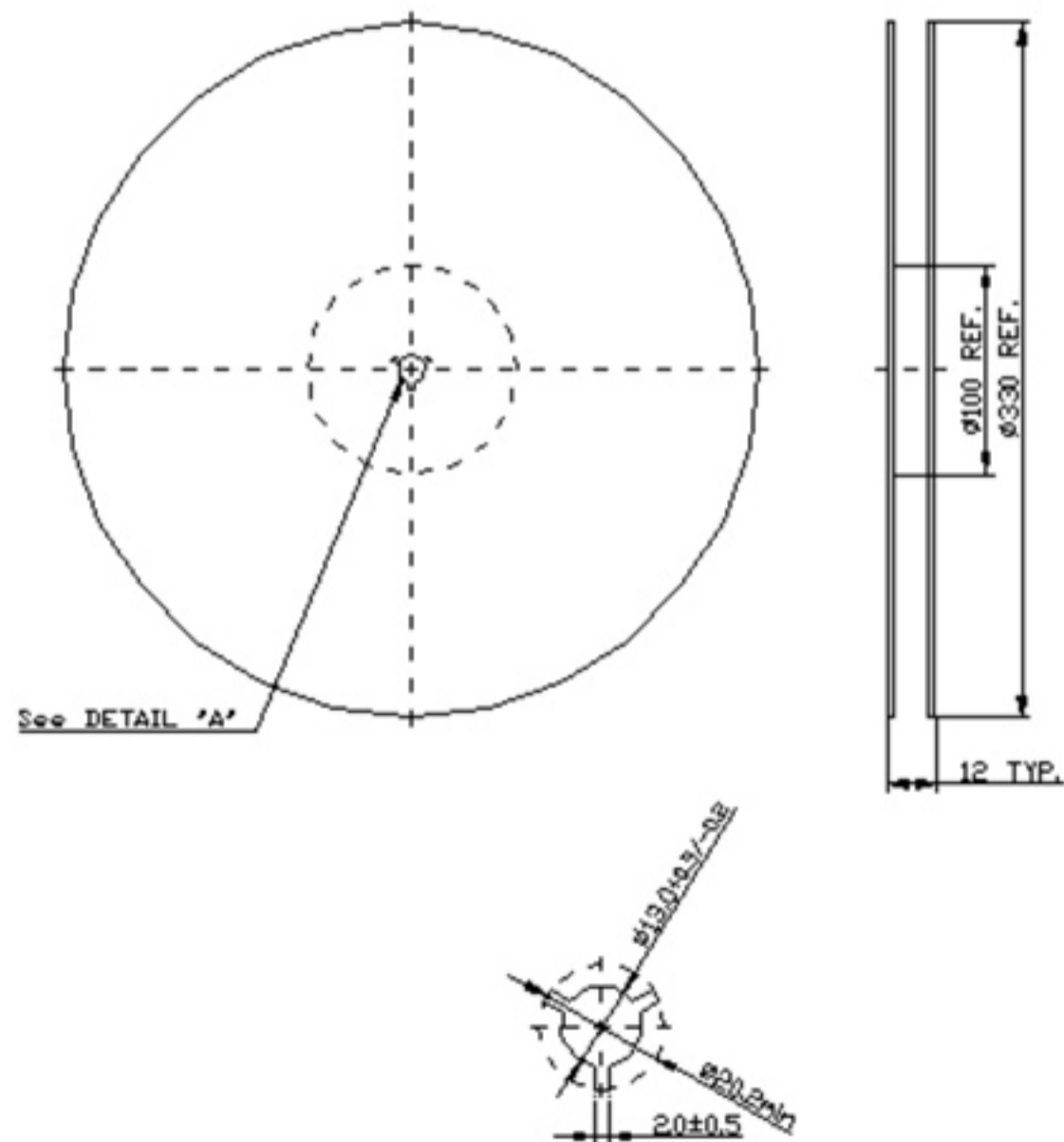
WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45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

F. PCB FOOTPRINT:

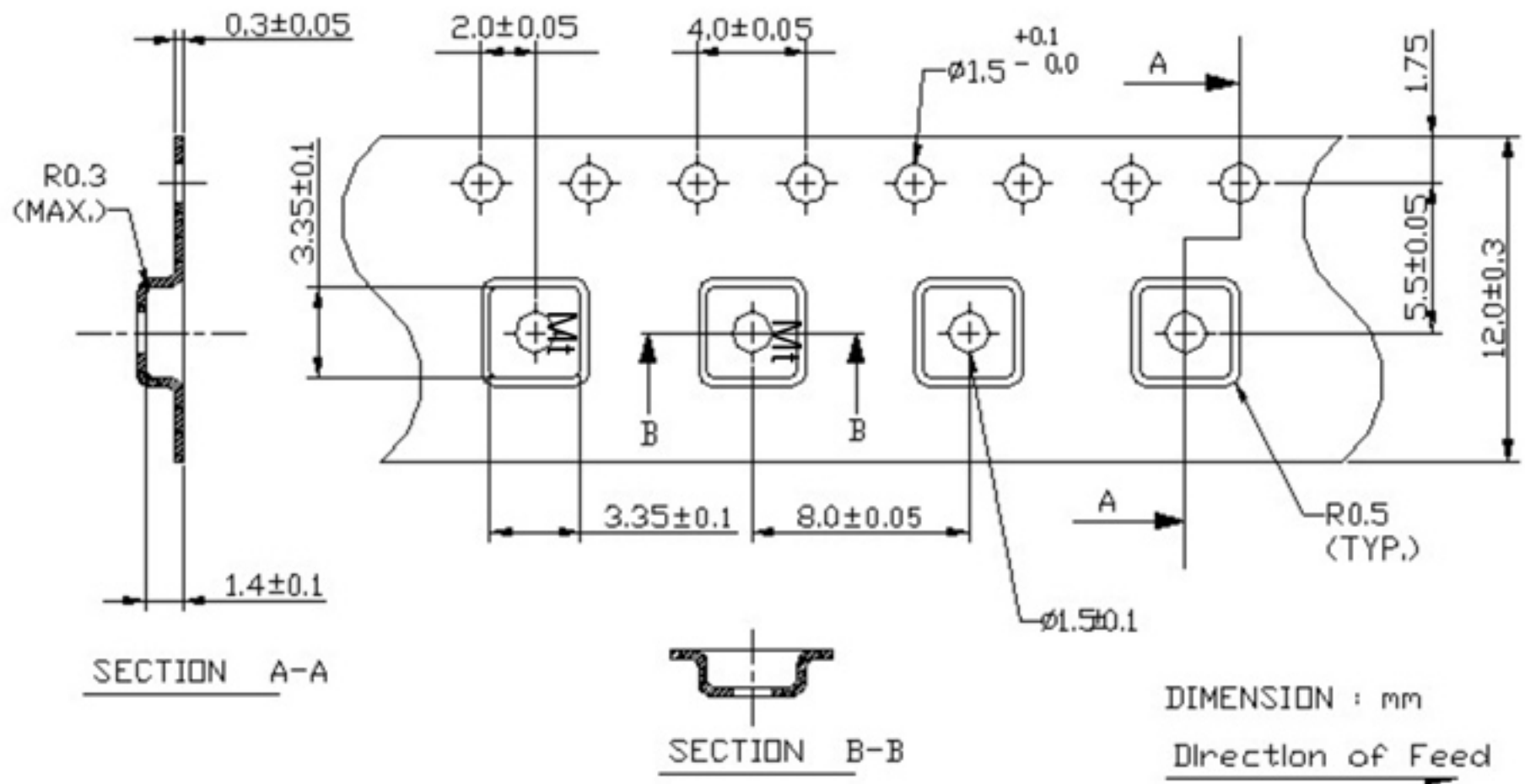


G. PACKING:

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.

