

SAW Filter 458.8875MHz

MODEL NO.:TA1959A

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3 V
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 (ESD)

B. ELECTRICAL CHARACTERISTICS:

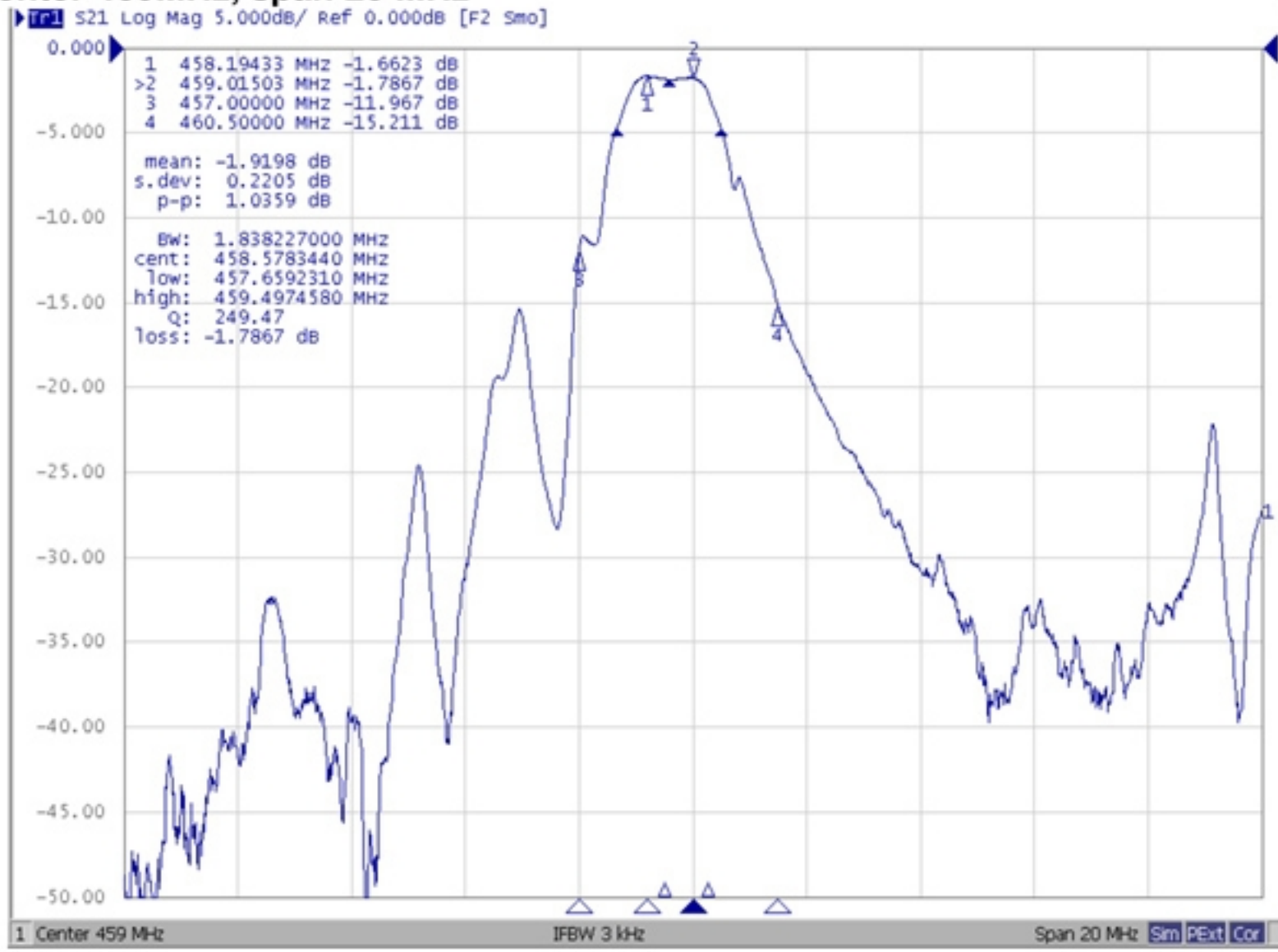
Terminating source impedance (single): $Z_s = 50 \Omega$

Terminating load impedance (single): $Z_L = 50 \Omega$

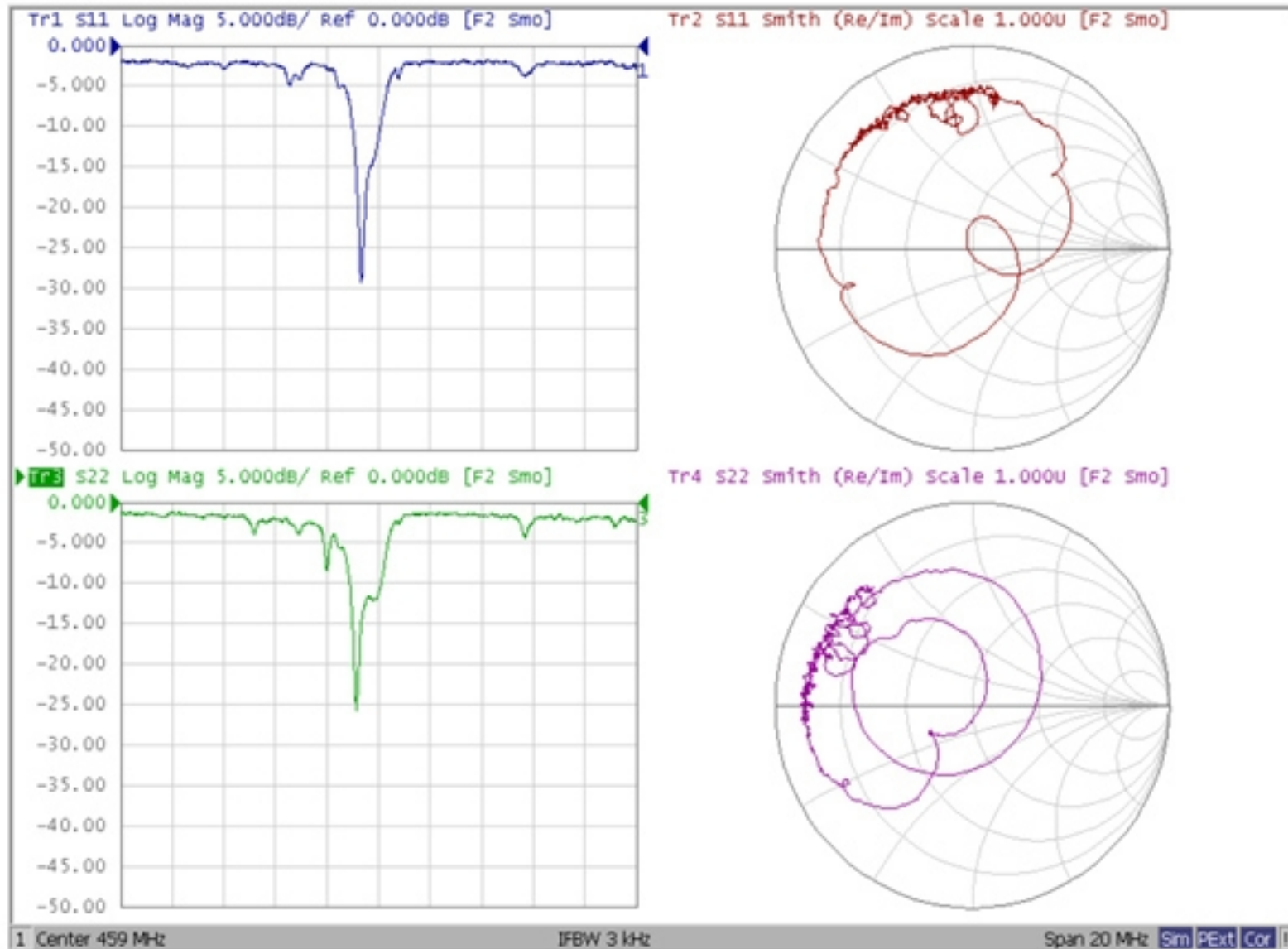
Item	Unit	Min	Type.	Max
Center Frequency	MHz	-	458.8875	-
Maximum Insertion Loss (458.5 ~ 459.275 MHz)	dB		3.0	4.0
Amplitude Ripple (458.5 ~ 459.275 MHz)	dB		1.2	2.0
2dB Bandwidth	MHz	0.775	1.500	
Attenuation (Reference level from IL min)				
10 ~ 135.9 MHz	dB	40	65	
135.9 ~ 446.5 MHz	dB	30	40	
446.5 ~ 457 MHz	dB	10	13	
460.5 ~ 469.8 MHz	dB	10	15	
469.8 ~ 515 MHz	dB	22	30	
515~1000 MHz	dB	40	44	
Temperature	ppm/k ²		-0.036	
Impedance (By NA simulation)				
Input: $Z_{IN} = L_{s1}/C_{p1}$	nH/pF		90/5	
Output: $Z_{OUT} = L_{s2}/C_{p2}$	nH/pF		88/5	

C. Frequency Characteristics:

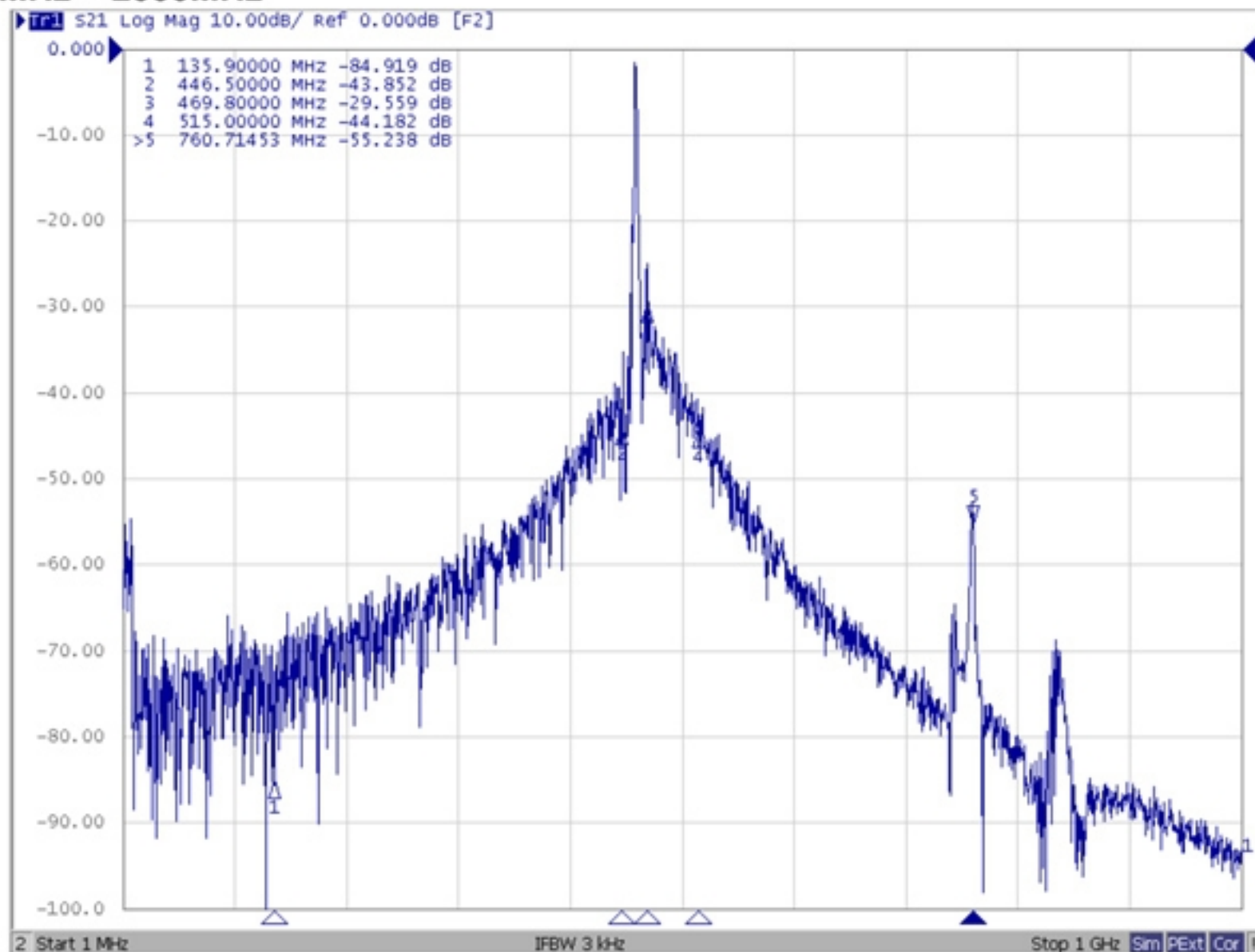
Center 460MHz, span 20 MHz



Reflective Characteristics

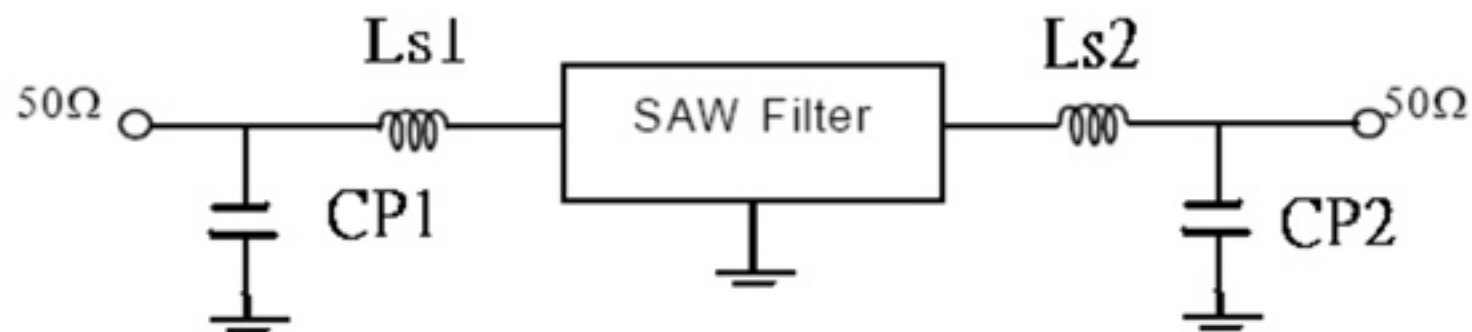


1MHz ~ 2000MHz



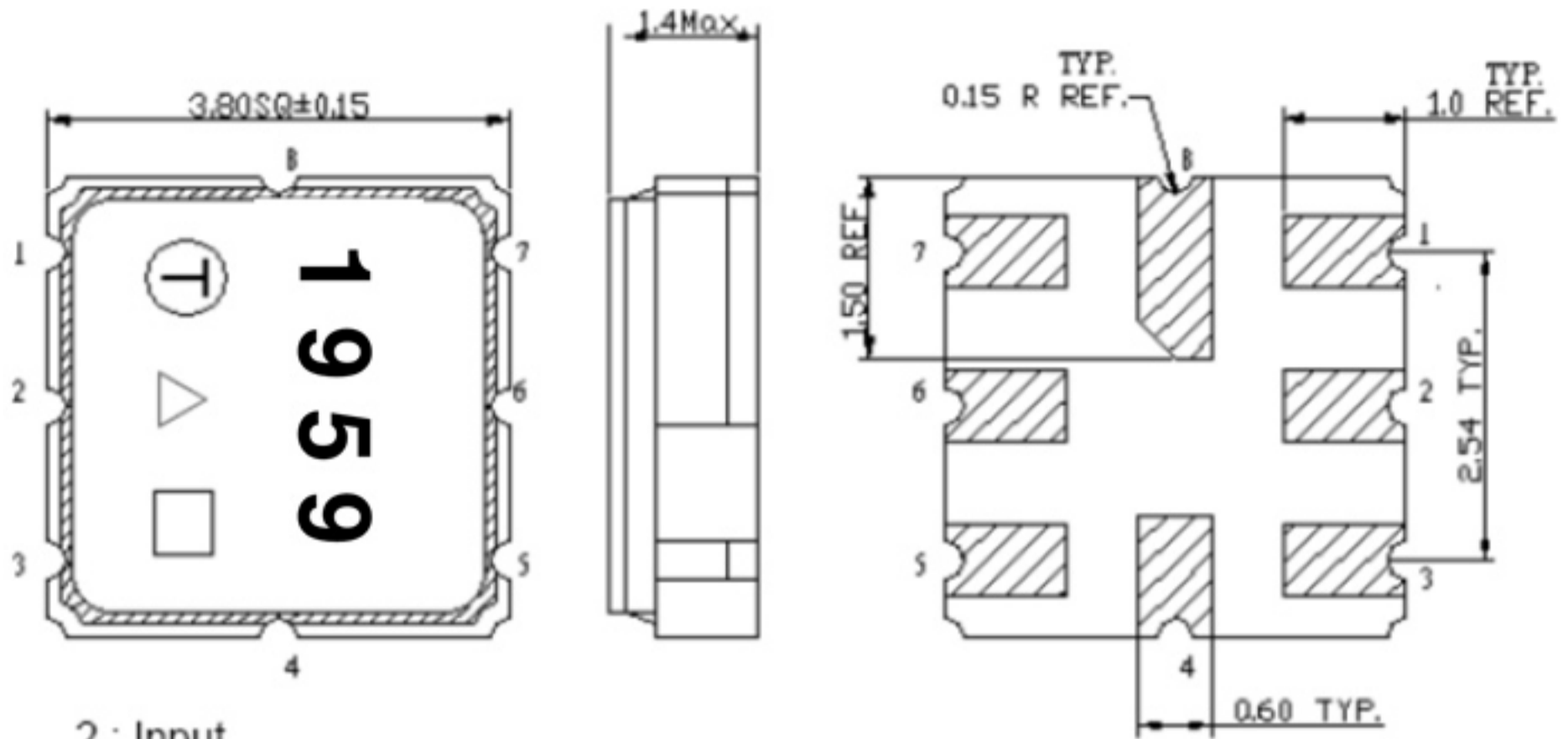
D.. TEST CIRCUIT:

The matching circuit is



$Ls1 = 90\text{nH}$, $Ls2 = 88\text{nH}$, $Cp1 = 5\text{pF}$, $Cp2 = 5\text{pF}$

E.OUTLINE DRAWING:



2 : Input

6: Output

1,3,4,5,7,8: Ground

△ : Year Code

□ : Date Code (W01->A, W02->B,...,W52->z)

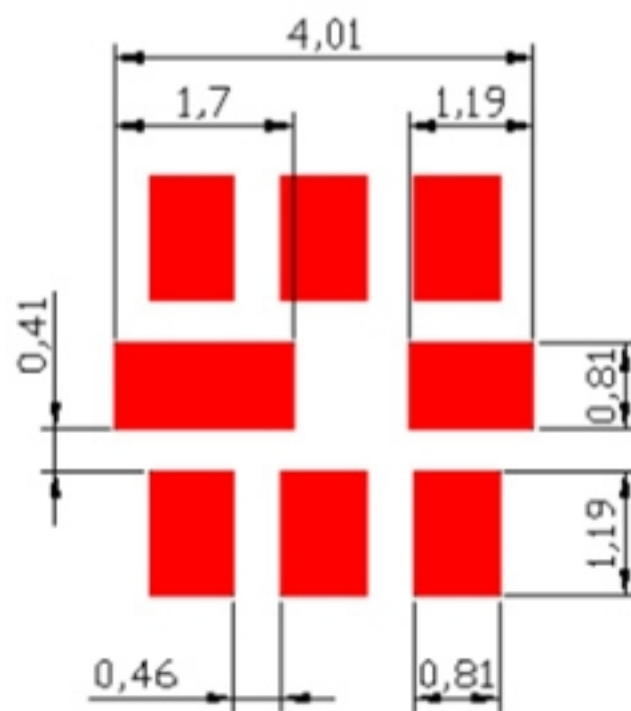
Product Year Code

Year	2009 2013	2010 2014	2011 2015	2012 2016
Product Code	A	a	A	a

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

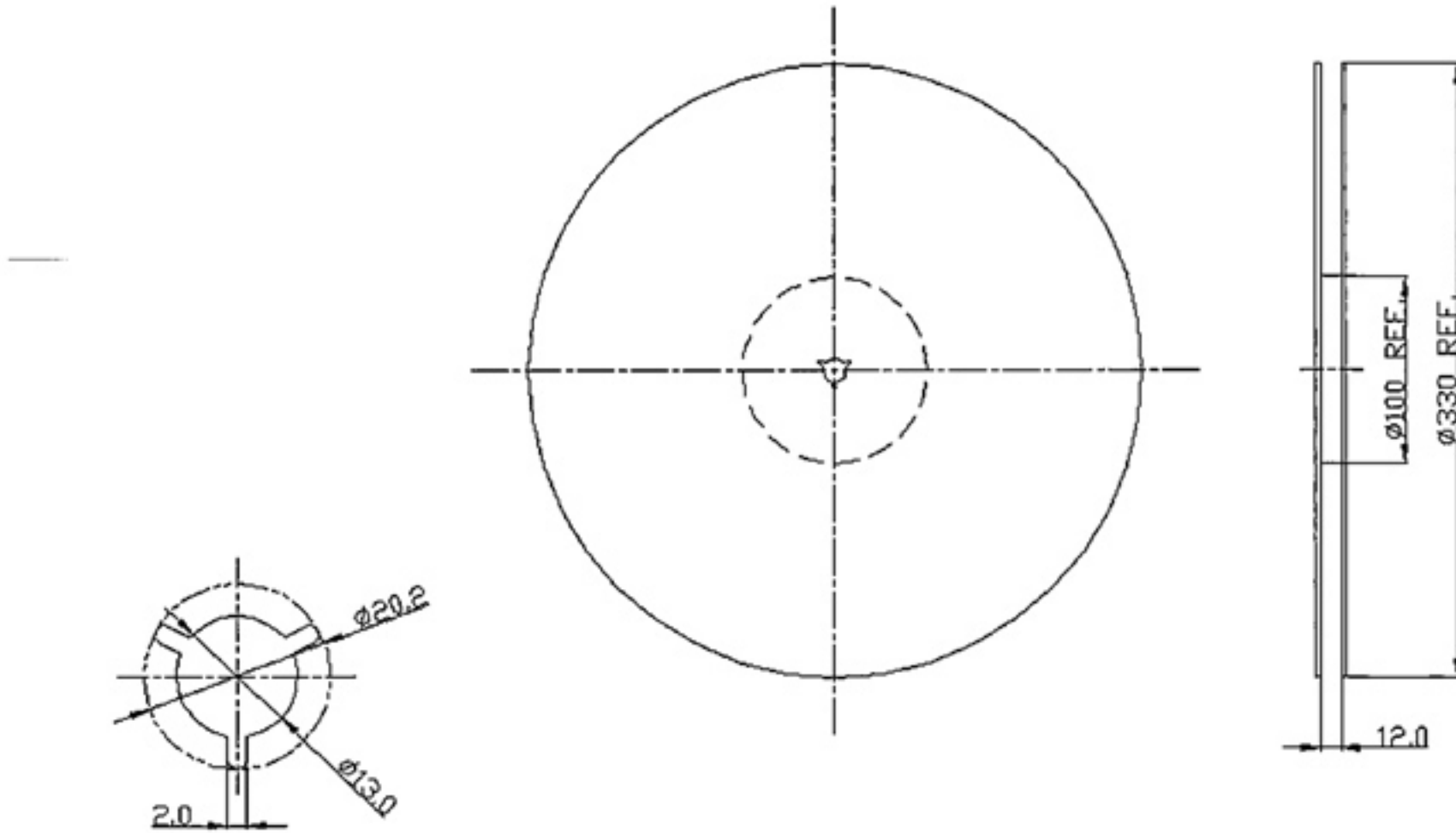
F. PCB FOOTPRINT:



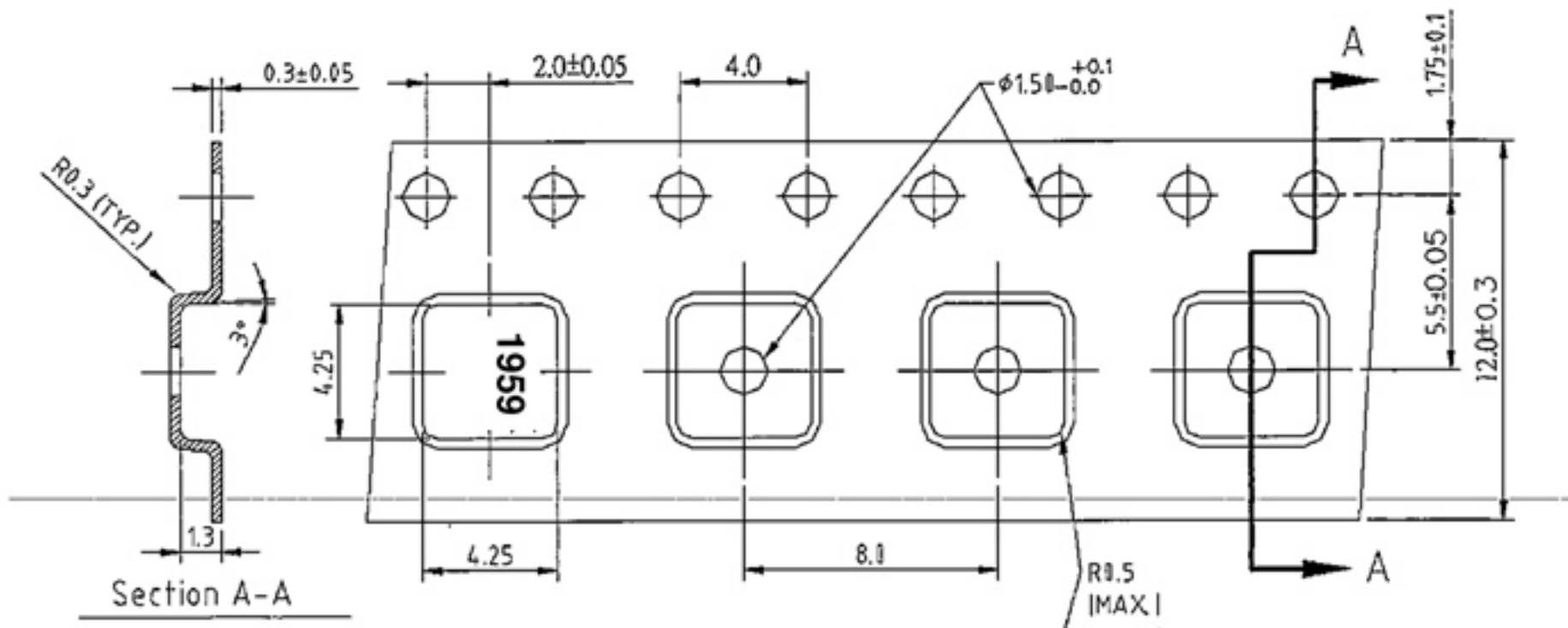
G. PACKING:

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.

