



SM1109

**MAXIMUM RATING**

- Input Power Level: 10 dBm
- DC Voltage : 3V
- Operating Temperature: -40°C to +85°C
- Storage Temperature: -55°C to +125°C
- Moisture Sensitive Level : Level 3(MSL3)
- ESD 100V(MM) 200V(HBM)

**ELECTRICAL CHARACTERISTICS**

Item	Unit	Min.	Type.	Max.	Note
<b>Center Frequency</b> Fc	MHz	-	876.5	-	-
<b>Insertion Loss</b> (859~894 MHz) IL	dB	-	2.1	3	-
(859~894 MHz) IL	dB	-	2.1	2.5	23 to 27°C
<b>VSWR</b> (859~894 MHz)		-	2	2.3	-
<b>Amplitude ripple</b> (859~894 MHz) <b>Attenuation</b>	dB	-	1.2	2.2	-
1 ~ 447 MHz	dB	40	46	-	-
814 ~ 849 MHz	dB	30	35	-	-
849 ~ 854 MHz	dB	3	22	-	-
849 ~ 854 MHz	dB	10	22	-	23 to 27°C
909 ~ 979 MHz	dB	25	32	-	-
979 ~ 6000 MHz	dB	20	34	-	-
6013 ~ 6258 MHz	dB	20	34	-	-
6258 ~ 12750 MHz	dB	10	15	-	-
Package size	mm	SMD 1.1x0.9			

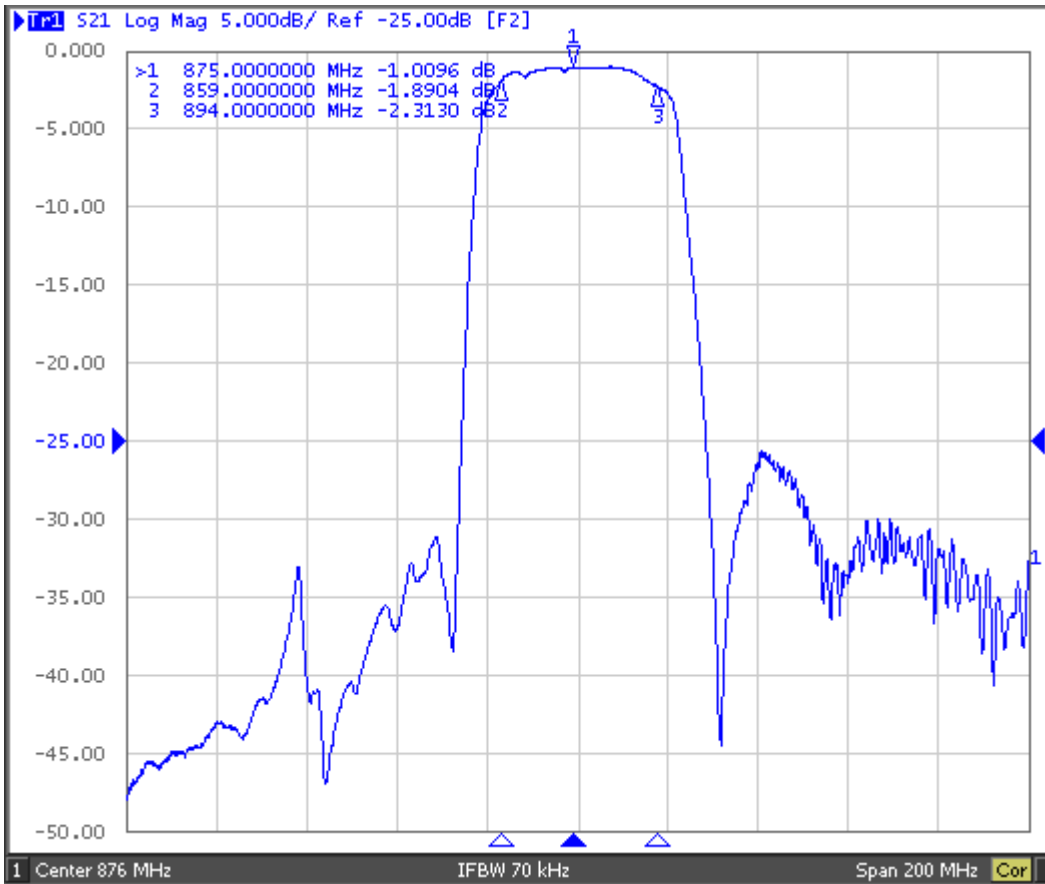
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling. NOTES:**



1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

# FREQUENCY CHARACTERISTICS

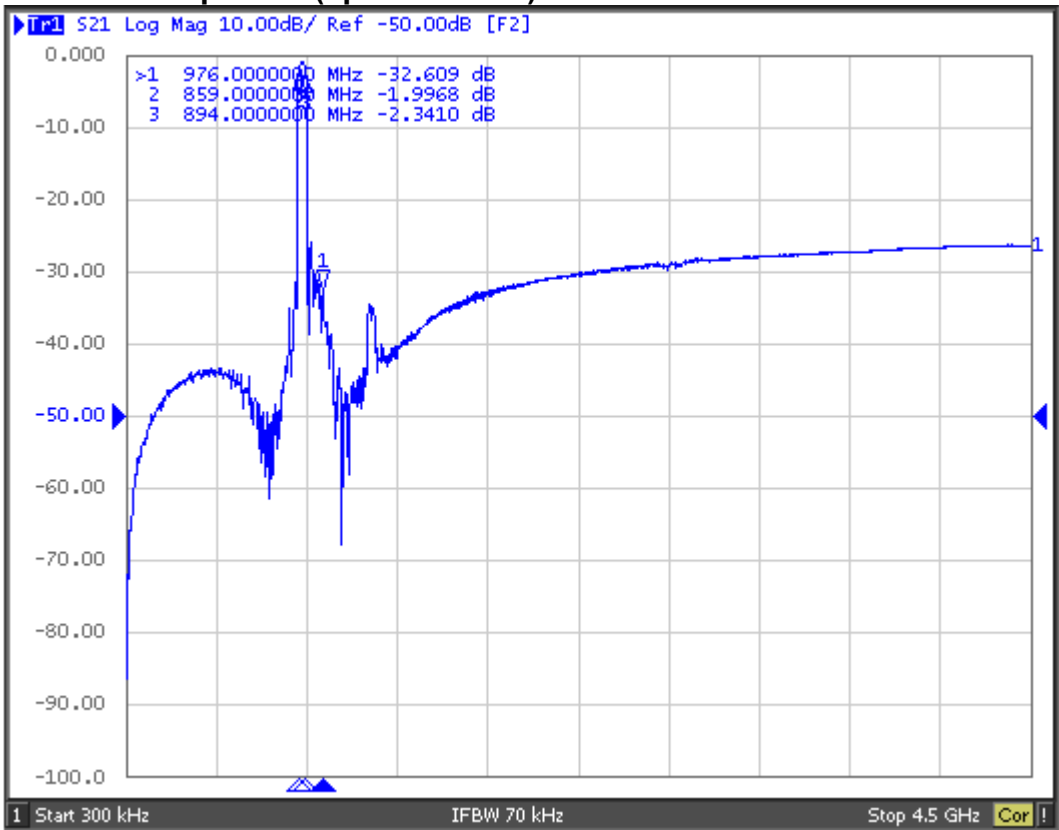
## S21 response: (span 200MHz)



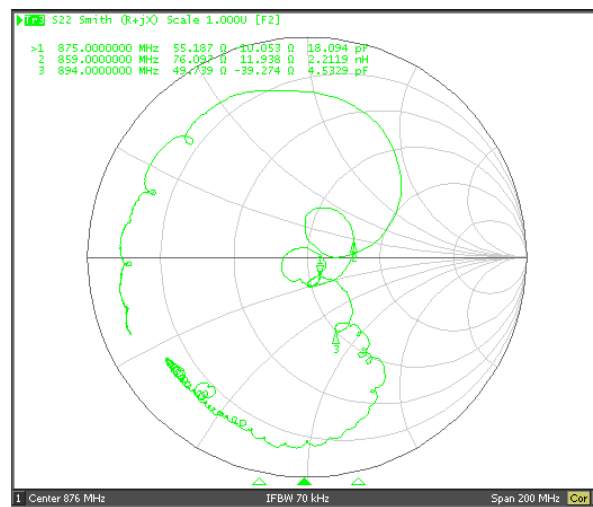
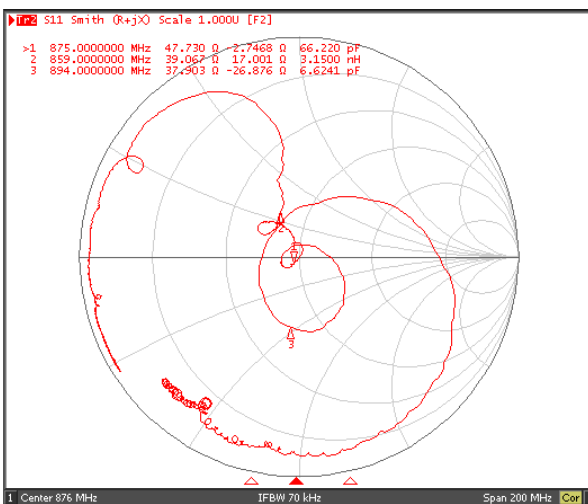
## S21 response: (span 100MHz)



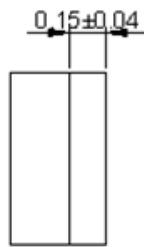
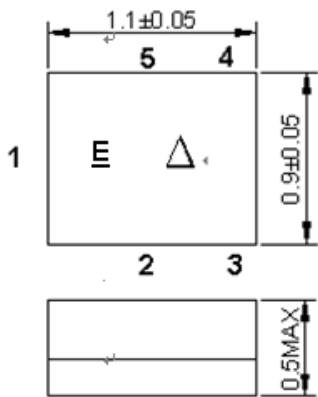
## S21 response: (span 100MHz)



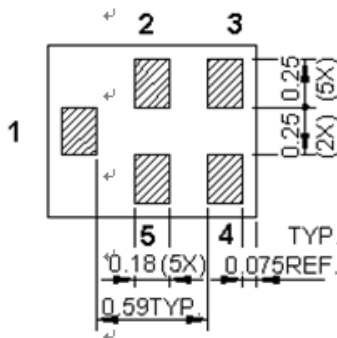
## S11/S22 :



## OUTLINE DRAWING



All tolerances are  $\pm 0.05$  mm unless otherwise specified  
 Coplanarity : 0.1 mm max.  
 1 to 5 : Pin No.  
 Unit : mm



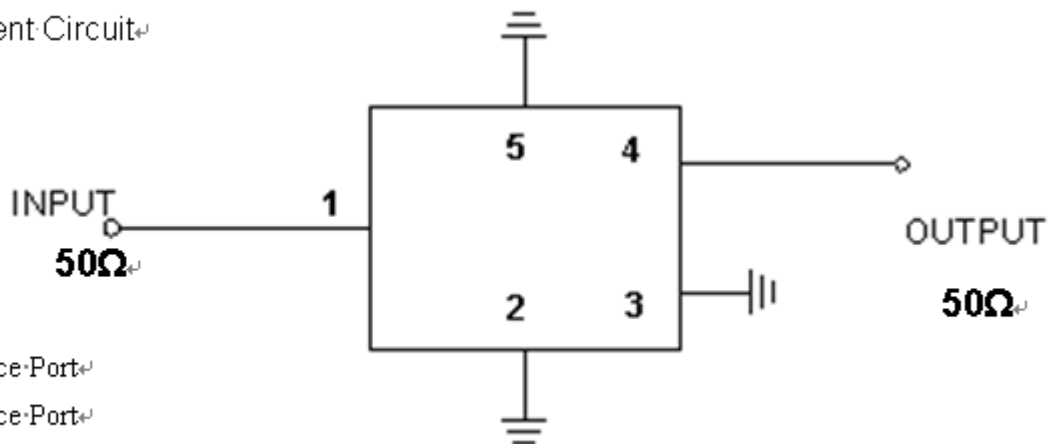
Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

## Δ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z

## MEASUREMENT CIRCUIT

Measurement Circuit

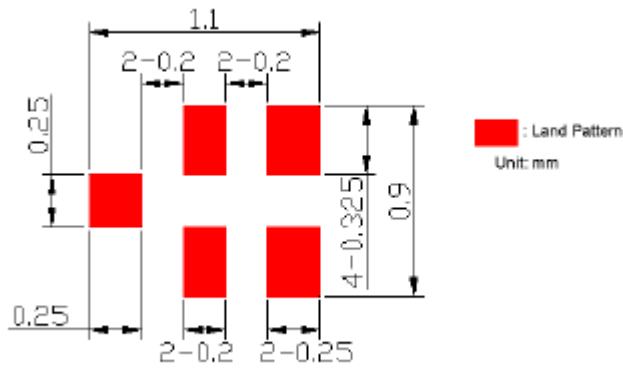


(1) : Unbalance Port

(4) : Unbalance Port

Others : Ground

# FOOT PRINT



# PACKING REEL DIMENSION

Reel Count  
 7" = 3000  
 13" = 10,000

