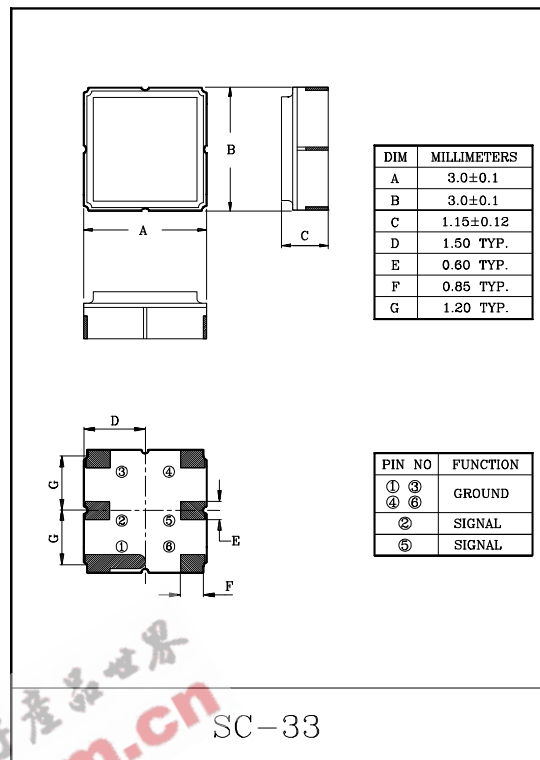


Band pass filter for RX of GSM.

- High stability and reliability with good performance and no adjustment.
- Wide and sharp pass band characteristics.
- Low insertion loss and deep stop band attenuation for interference.

### MAXIMUM RATINGS

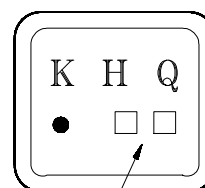
ITEM	SYMBOL	RATING	UNIT
Input Signal Level	$IS_{max}$	+23	dBm
DC Permissive Voltage	$V_{DC}$	-5~+5	V
Operating Temperature Range	$T_{opr}$	-30~+85	°C
Storage Temperature Range	$T_{stg}$	-40~+100	°C



### ELECTRICAL CHARACTERISTICS ( $T_a = -30 \sim +85^\circ\text{C}$ )

ITEMS	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Nominal Center Frequency	$f_0$	-	-	947.5	-	MHz
Bandwidth	$BW_{3dB}$	-	$f_0 \pm 12.5$	-	-	MHz
Insertion Loss	$IL_{PASS}$	$f_0 \pm 12.5\text{MHz}$	-	2.2	3.5	dB
Ripple Level	$A_{RIP}$	$f_0 \pm 12.5\text{MHz}$	-	1.0	2.0	dB
Rejection Level	$IL_{STOP}$	DC~890MHz	20	27	-	dB
		890~915MHz	20	27	-	
		980~1025MHz	20	30	-	
		1025~1105MHz	23	28	-	
		1105~1600MHz	25	32	-	
1600~2000MHz	25	30	-			
Voltage Standing Wave Ratio	VSWR	$f_0 \pm 12.5\text{MHz}$	-	1.8	2.7	-
Input/Output Impedance	$Z_I(Z_O)$	-	-	50Ω//0pF	-	-

### Marking

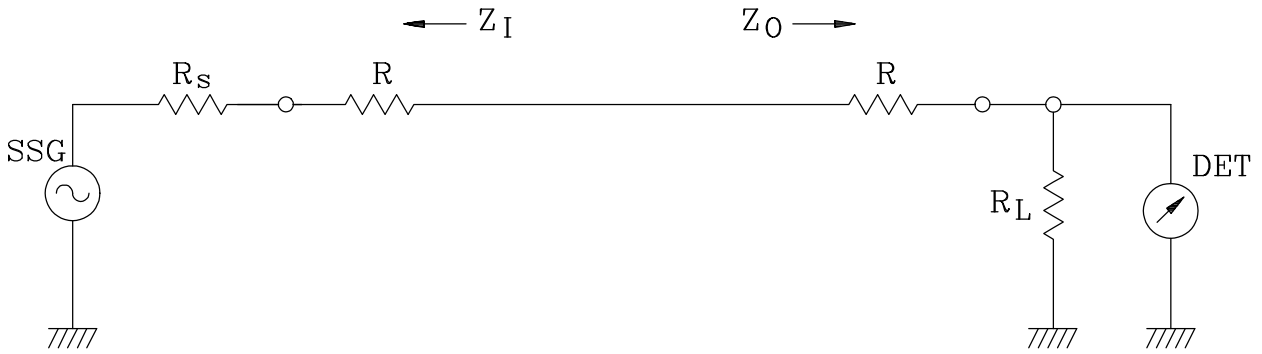


Lot No.

# KF947FU

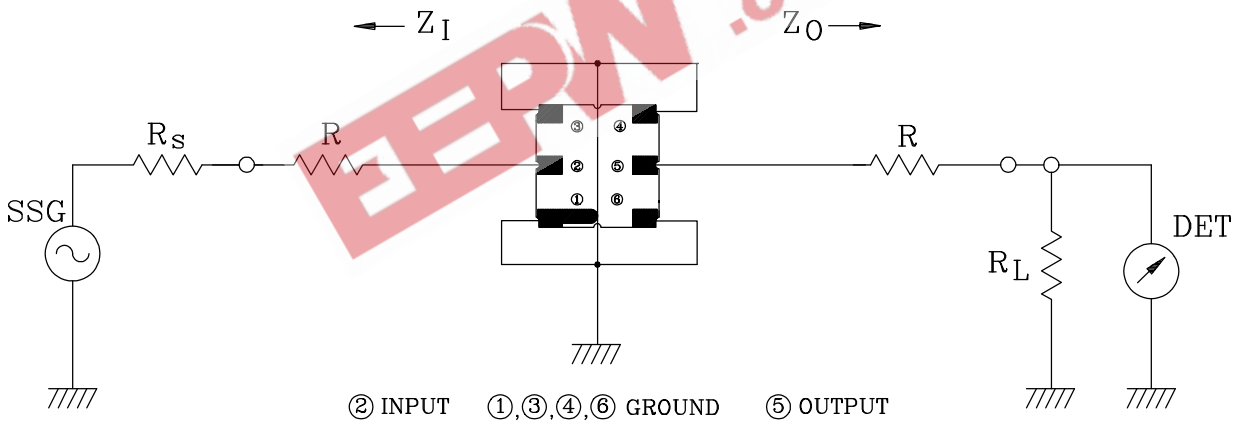
## TEST CIRCUIT

### REFERENCE LEVEL TEST CIRCUIT



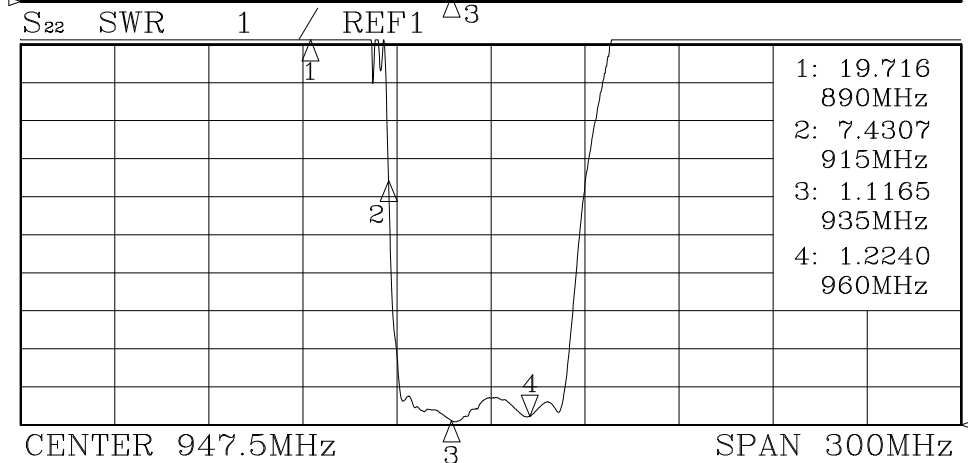
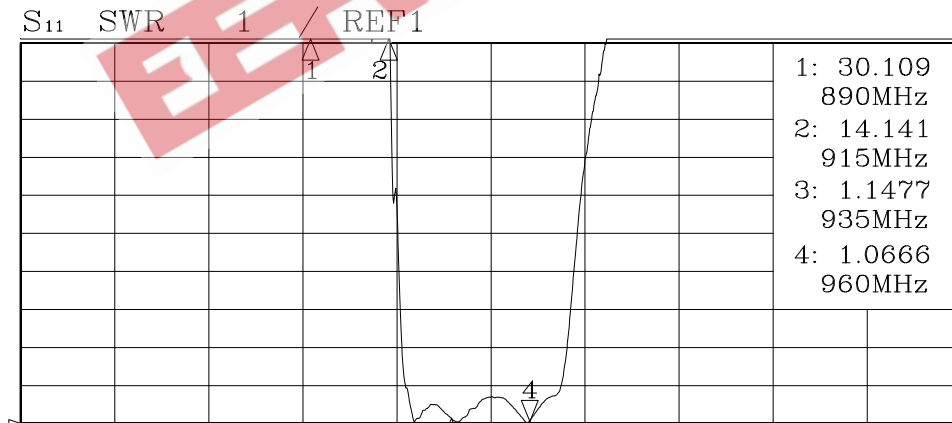
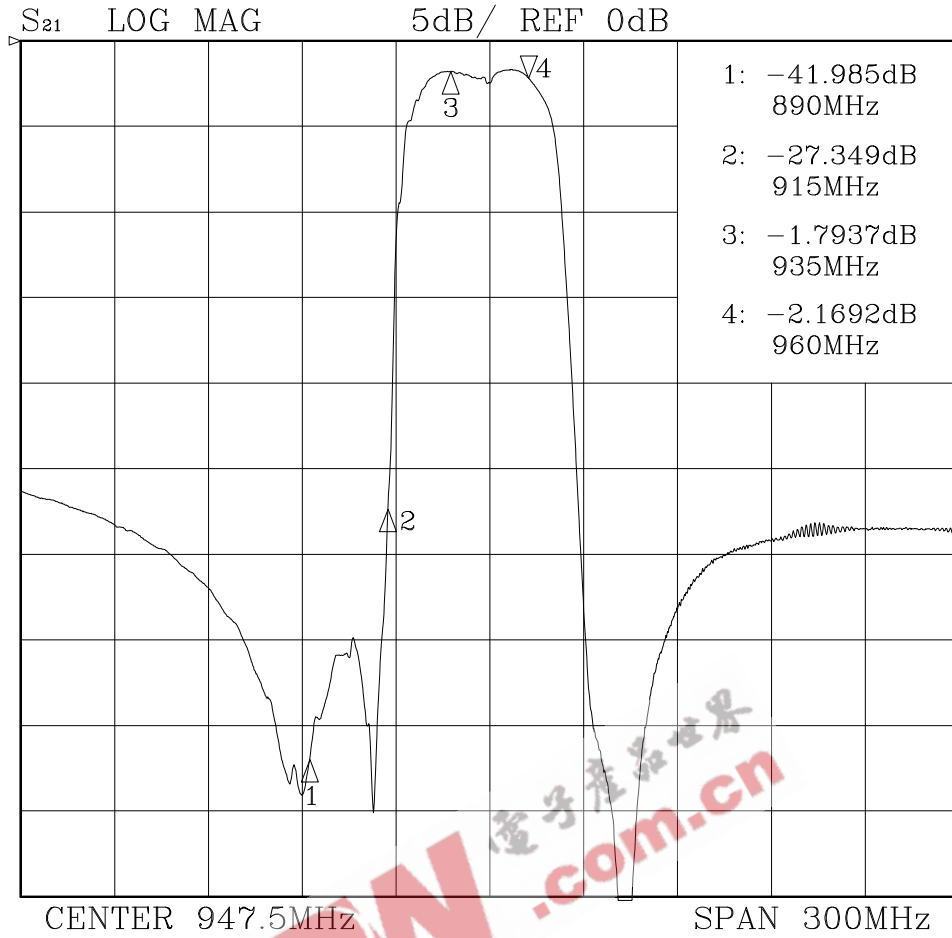
$R_s, R_L : 50\Omega$  (Internal Impedance of Source and Load)  
 $R : 0\Omega$   
 $Z_I(Z_O)=R_s(R_L)+R$

### MEASUREMENT CIRCUIT



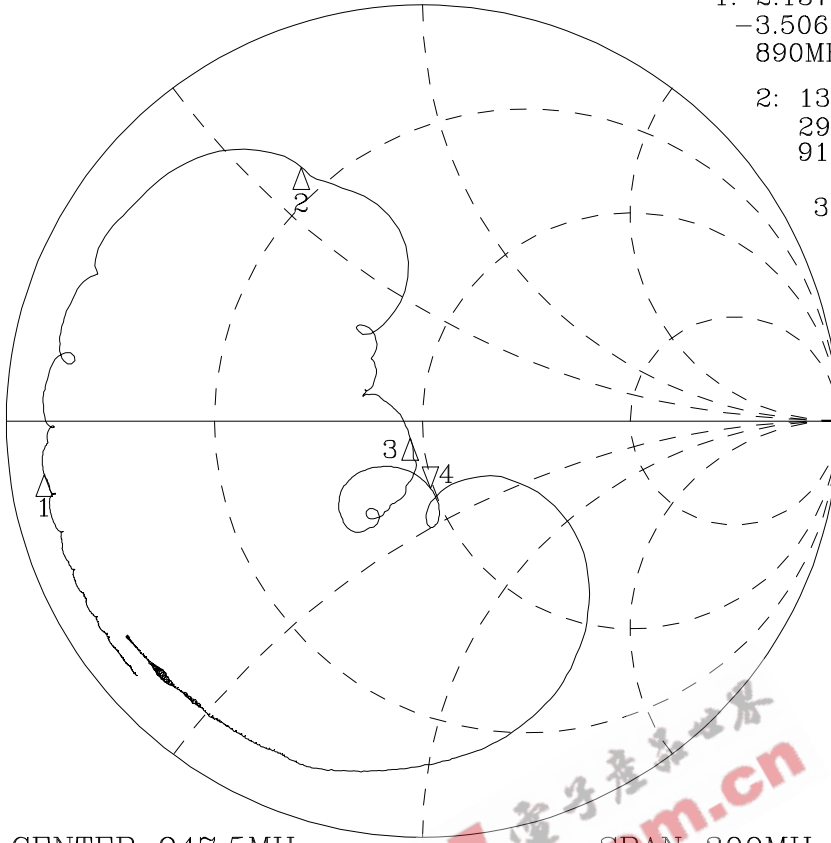
$R_s, R_L : 50\Omega$  (Internal Impedance of Source and Load)  
 $R : 0\Omega$   
 $Z_I(Z_O)=R_s(R_L)+R$

# KF947FU



# KF947FU

S<sub>22</sub> 1UFS



1: 2.1378Ω  
-3.5065Ω  
890MHz

2: 13.330Ω  
29.923Ω  
915MHz

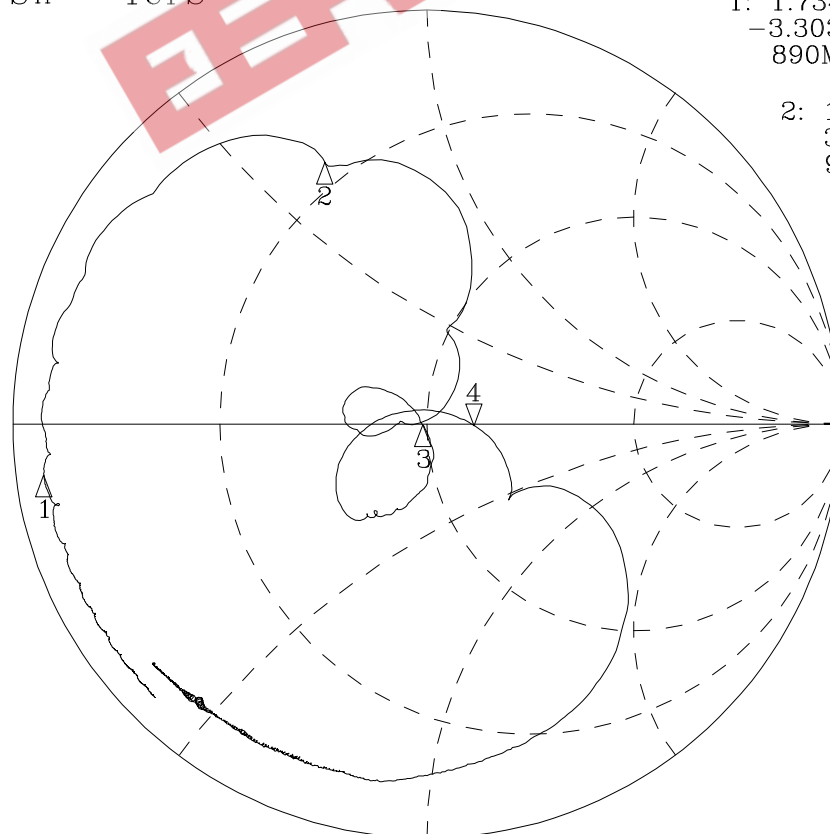
3: 47.074Ω  
-3.9727Ω  
935MHz

4: 49.279Ω  
-16.396Ω  
960MHz

CENTER 947.5MHz

SPAN 300MHz

S<sub>11</sub> 1UFS



1: 1.7341Ω  
-3.3033Ω  
890MHz

2: 13.736Ω  
32.395Ω  
915MHz

3: 49.051Ω  
-218.75Ω  
935MHz

4: 63.000Ω  
-460.94Ω  
960MHz

CENTER 947.5MHz

SPAN 300MHz