SK3020RB

MSL 3 Device

Band2, RF-Rx Balance SAW Filter
Revision 0: August 2016

- ❒ Electrical Characteristics
- ❒ Package Dimensions
- ❒ Testing Environment
- ❒ Frequency Characteristics

❒ Electrical Characteristics

Maximum Ratings

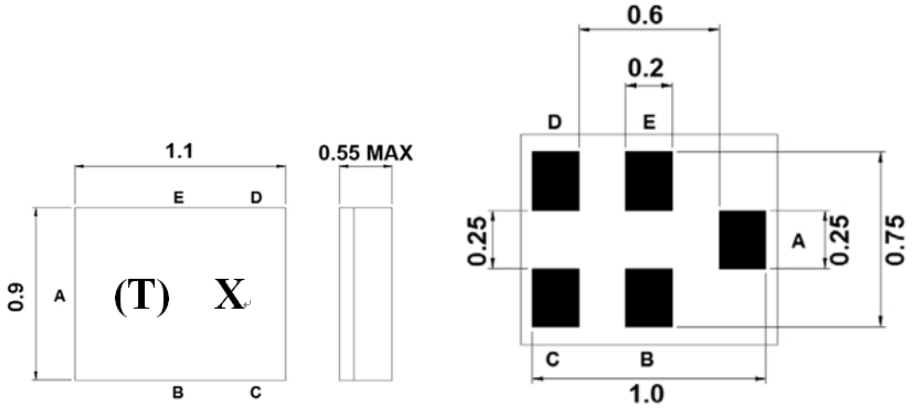
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	℃	-30	-	+85
Storage Temperature Range	℃	-40	-	+85
Maximum DC Voltage	V	-	-	-
Maximum Input Power	dBm	-	-	10
Source Impedance (unbalance)(1)	□	-	50	-
Load Impedance (balance)(1)	□	-	100//27nH	-
Package type & size	C14			
Length x Width	mm²	-	1.1 x 0.9	-
Height	mm	-	-	0.55

Electrical Specification

Parameters Description	Unit	Minimum	Typical @+25°C	Maximum	Remarks
Center Frequency (Fo)	MHz	-	1960.0	-	
Insertion Loss within 1930.0 ~ 1990.0 MHz	dB	-	2.8	3.7	@1930.6~1989.4
	dB	-	-	4.0	
Amplitude Ripple within 1930.0 ~ 1990.0 MHz	dB_{p-p}	-	1.1	2.3	@1930.6~1989.4
	dB_{p-p}	-	-	2.6	
Input VSWR within 1930.0 ~ 1990.0 MHz	-	-	2.0	2.2	
Output VSWR within 1930.0 ~ 1990.0 MHz	-	-	2.0	2.3	
Amplitude balance within 1930.0 ~ 1990.0 MHz	dB	-1.8	-0.9/+1.0	+1.8	
Phase balance within 1930.0 ~ 1990.0 MHz	deg.	-15	-4.6/+8.5	+15	
Attenuation:					
10.0 ~ 1850.0 MHz	dB	40	54	-	
824.0 ~ 849.0 MHz	dB	50	62	-	
1850.0 ~ 1910.0 MHz	dB	35	46	-	
2020.0 ~ 2070.0 MHz	dB	15	22	-	
2070.0 ~ 6000.0 MHz	dB	25	32	-	

Notes : (1) With Matching Network.

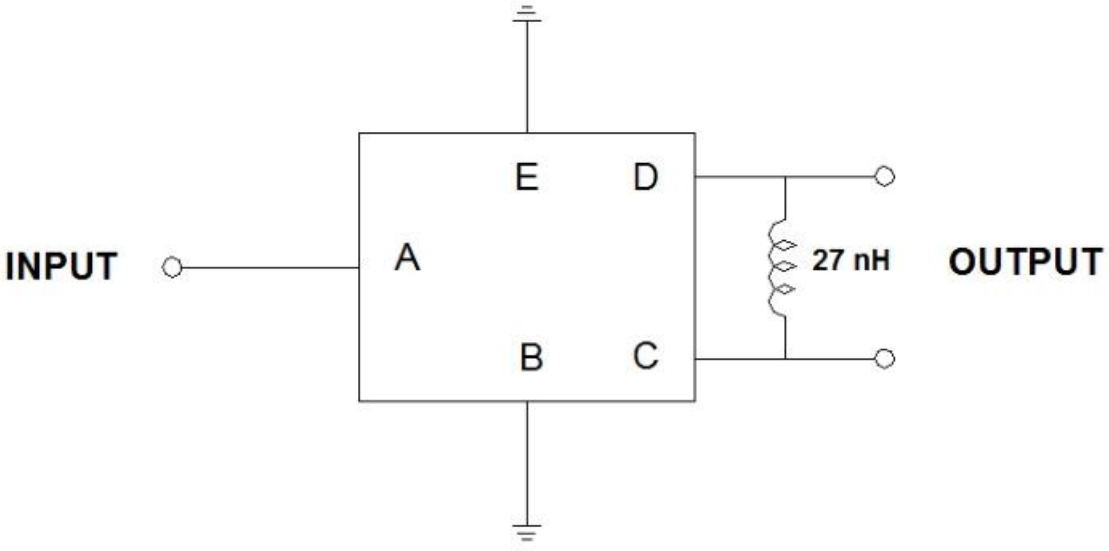
❒Package Dimensions



Marking Descriptions	
(T)	Series Number
X	Date Code(Year+Month)

Pin Description	
B, E	Ground
A	Input
C, D	Balanced Output

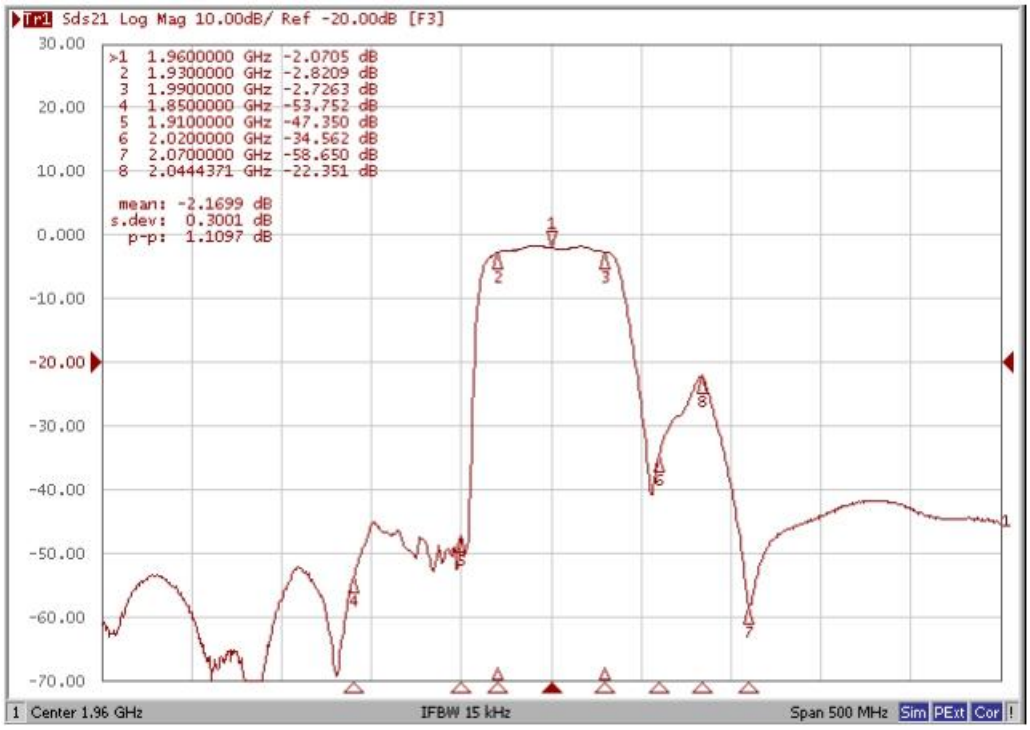
❒ Testing Environment

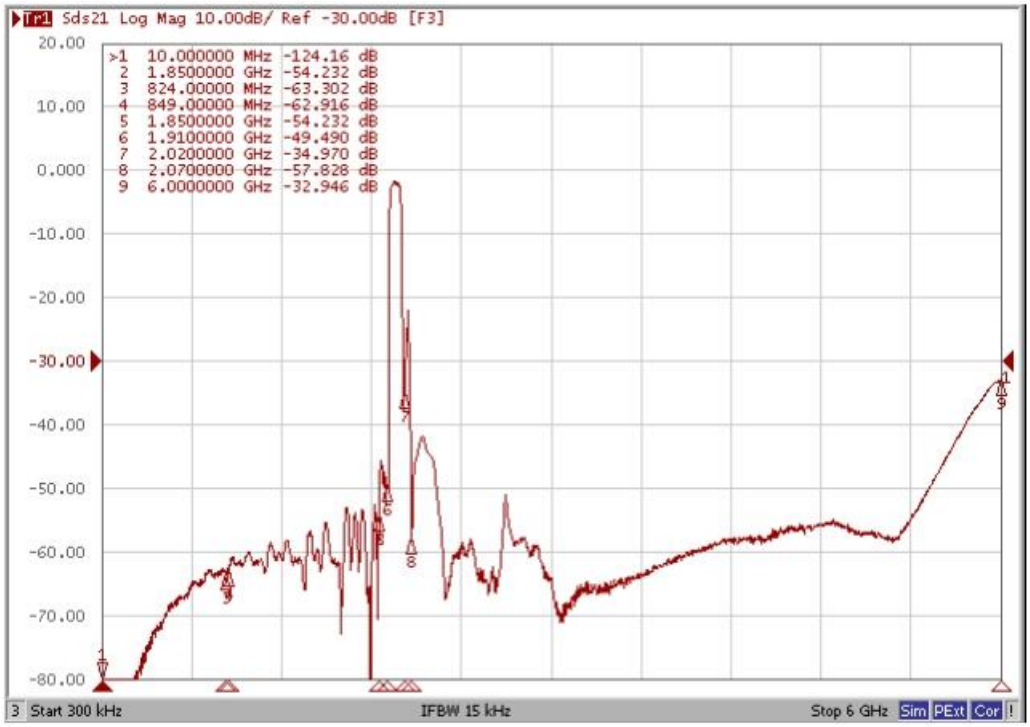


Source Impedance: 50
Load Impedance : 100

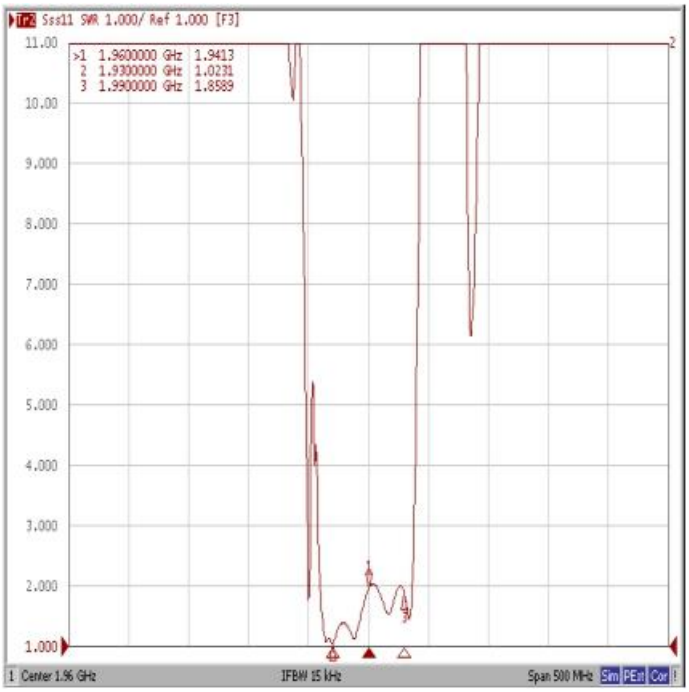
❒ Frequency Characteristics

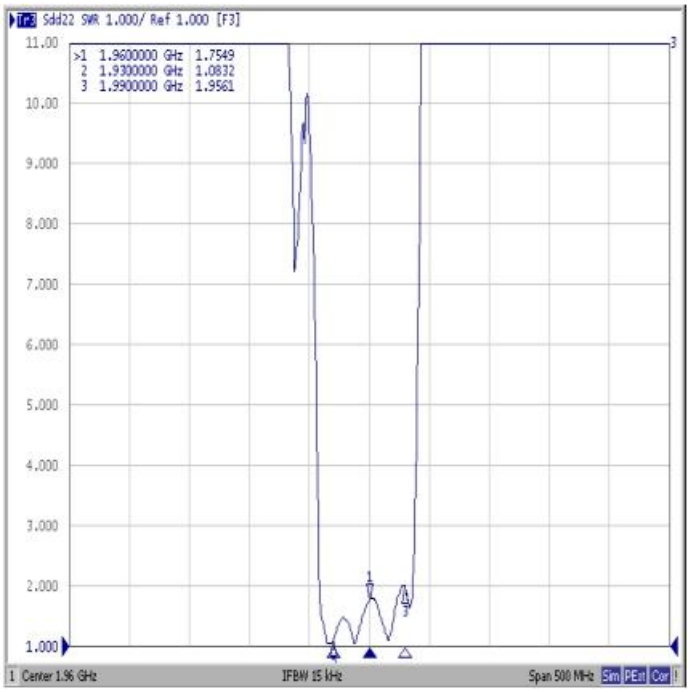
Frequency Response



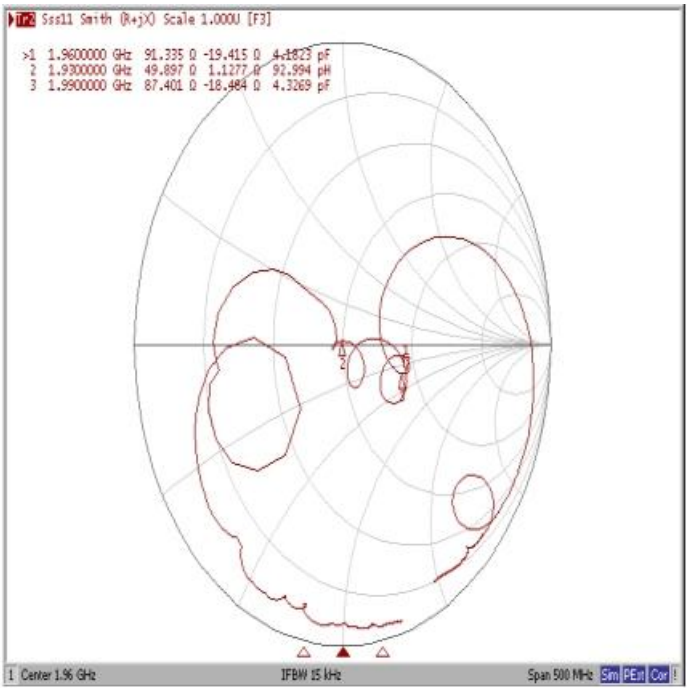


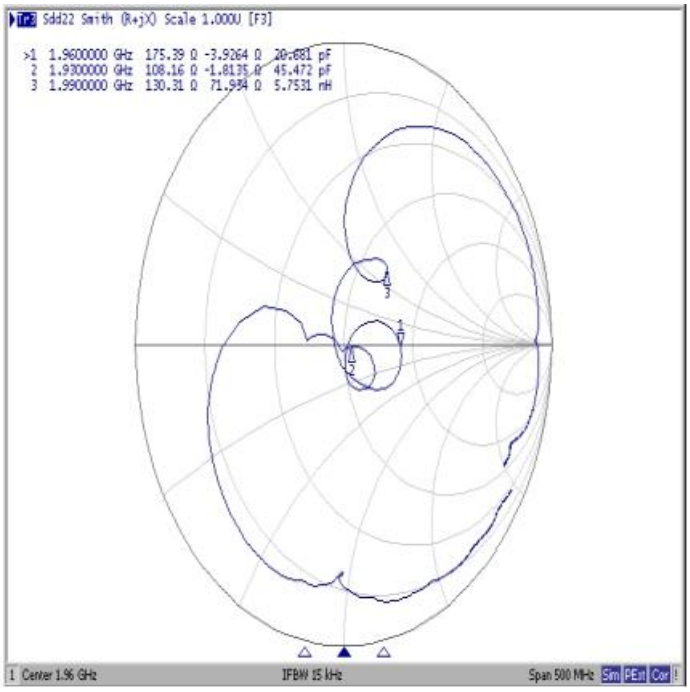
VSWR





Smith Chart





Amplitude balance

Phase balance