SK3070RB

MSL 3 Device

Band7, RF-Rx Balance SAW Filter
Revision 0: August 2016

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

❒ Electrical Characteristics

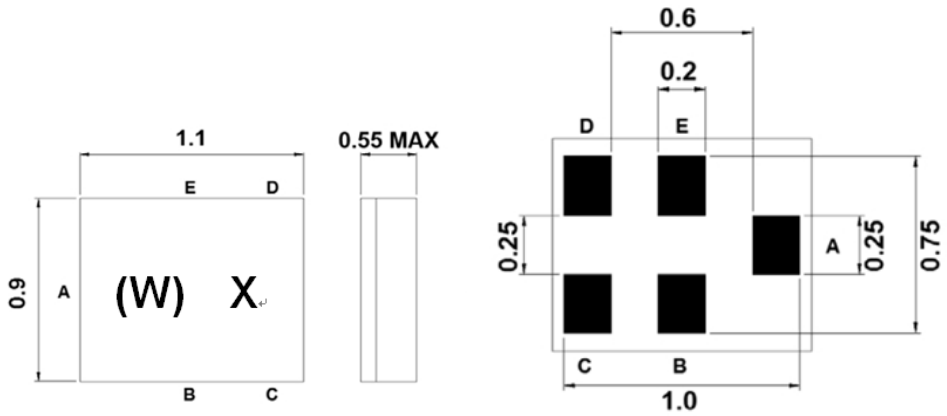
Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	℃	-30	-	+85
Storage Temperature Range	℃	-40	-	+85
Maximum DC Voltage	V	-	-	0
Maximum Input Power	dBm	-	-	15
Source Impedance (unbalance)(1)	□	-	50	-
Load Impedance (balance)(1)	□	-	100//22nH	-
Package type & size	C14			
Length x Width	mm^2	-	1.1 x 0.9	-
Height	mm	-	-	0.55

Electrical Specification

Parameters Description	Unit	Minimum	Typical @+25°C	Maximum
Center Frequency (Fo)	MHz	-	2655.0	-
Insertion Loss within 2620.0 ~ 2690.0 MHz	dB	-	2.5	3.3
Amplitude Ripple within 2620.0 ~ 2690.0 MHz	dB_{p-p}	-	0.9	1.7
Input VSWR within 2620.0 ~ 2690.0 MHz	-	-	1.8	2.2
Output VSWR within 2620.0 ~ 2690.0 MHz	-	-	1.8	2.2
Amplitude Balance within 2620.0 ~ 2690.0 MHz	dB	-1.6	-0.6/+1.1	+1.6
Phase Balance within 2620.0 ~ 2690.0 MHz	deg	-12	-1.5/+7	+12
Attenuation:				
10.0 ~ 2500.0 MHz	dB	40	46	-
2500.0 ~ 2570.0 MHz	dB	45	49	-
2750.0 ~ 3000.0 MHz	dB	18	24	-
3000.0 ~ 4000.0 MHz	dB	30	43	-
4000.0 ~ 5240.0 MHz	dB	30	43	-
5240.0 ~ 5380.0 MHz	dB	30	44	-
5380.0 ~ 6000.0 MHz	dB	25	43	-

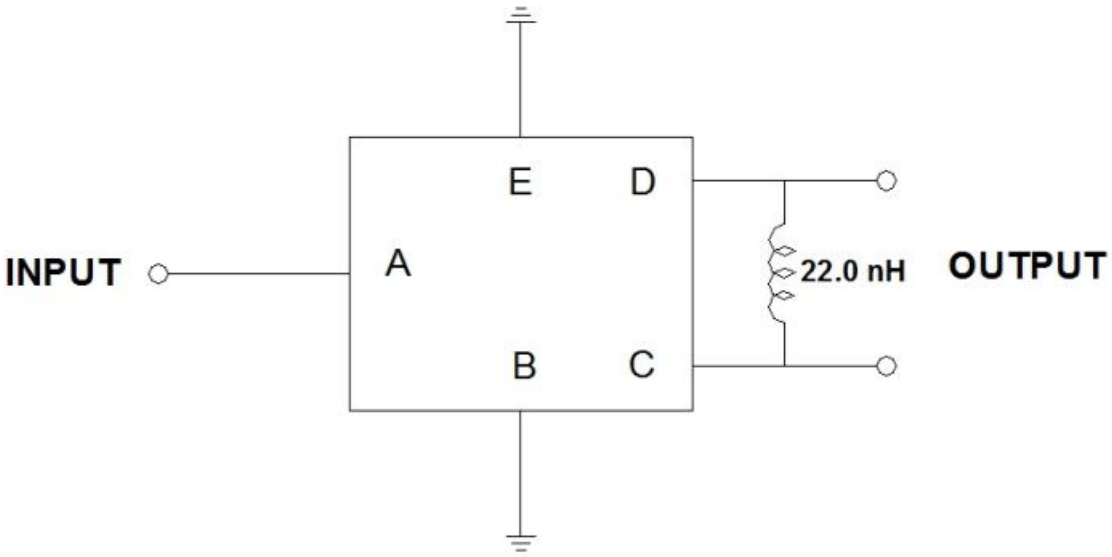
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).



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

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

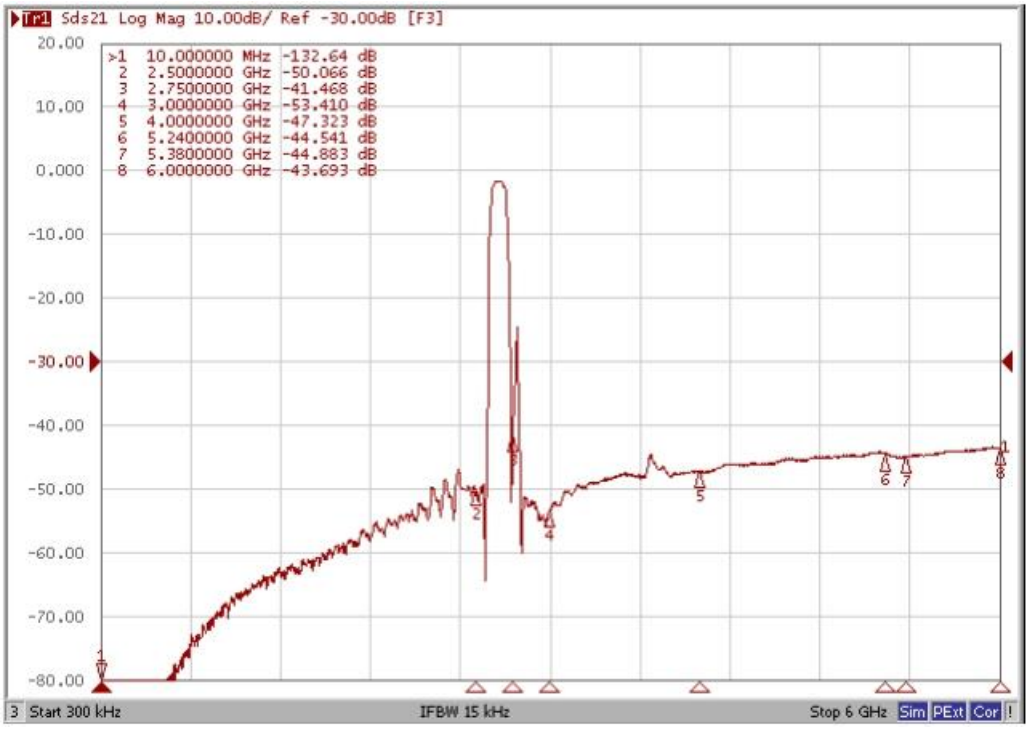
❒ Testing Environment



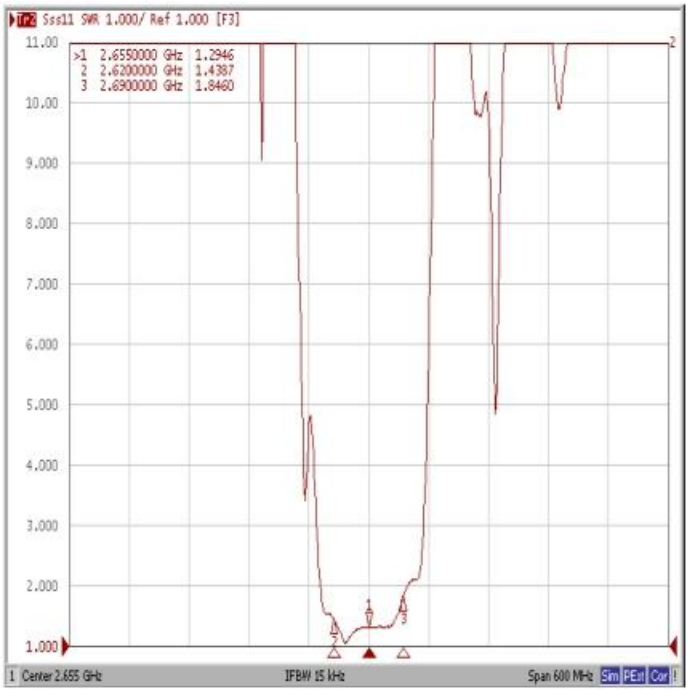
Source Impedance : 50 ☐
Load Impedance : 100

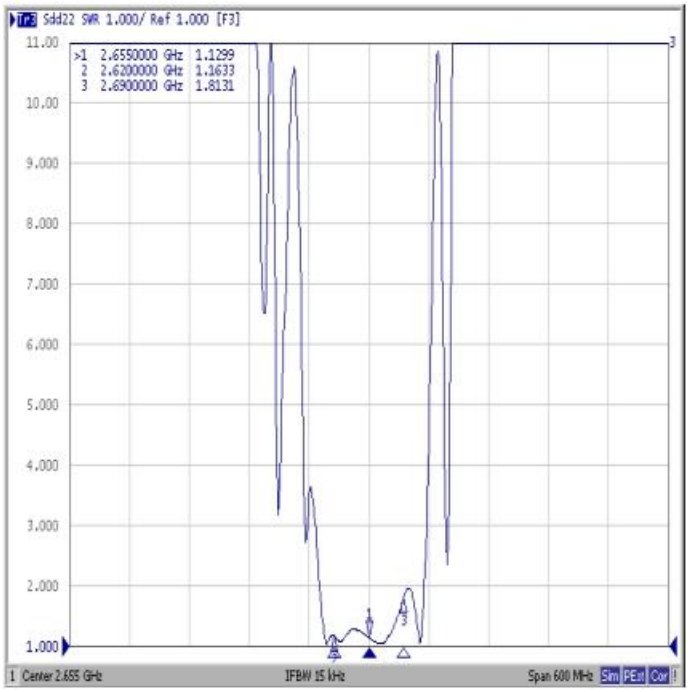
❒ Frequency Characteristics

Frequency Response

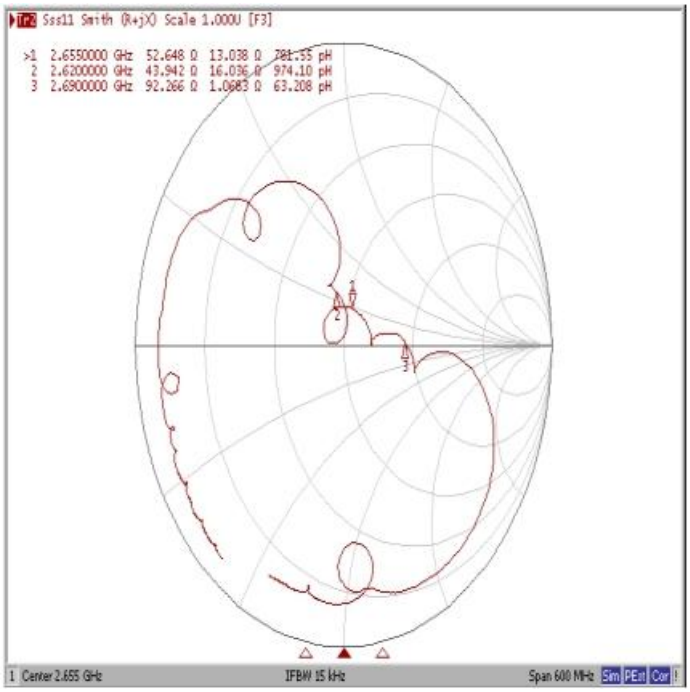


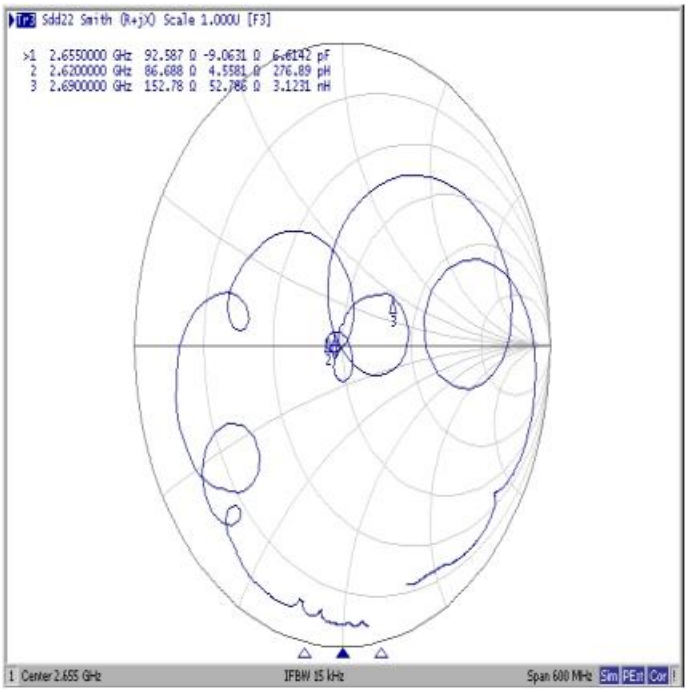
VSWR





Smith Chart





Amplitude balance

Phase balance