

# SK3030RB

Band3, RF-Rx Balance SAW Filter  
Revision 0: August 2016

**MSL 3 Device**



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

## □ Electrical Characteristics

### Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	+85
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	0
Maximum Input Power	dBm	-	-	15
Source Impedance (unbalance) <sup>(1)</sup>	□	-	50	-
Load Impedance (balance) <sup>(1)</sup>	□	-	100//18nH	-
Package type & size	C14			
Length x Width	mm <sup>2</sup>	-	1.1 x 0.9	-
Height	mm	-	-	0.55

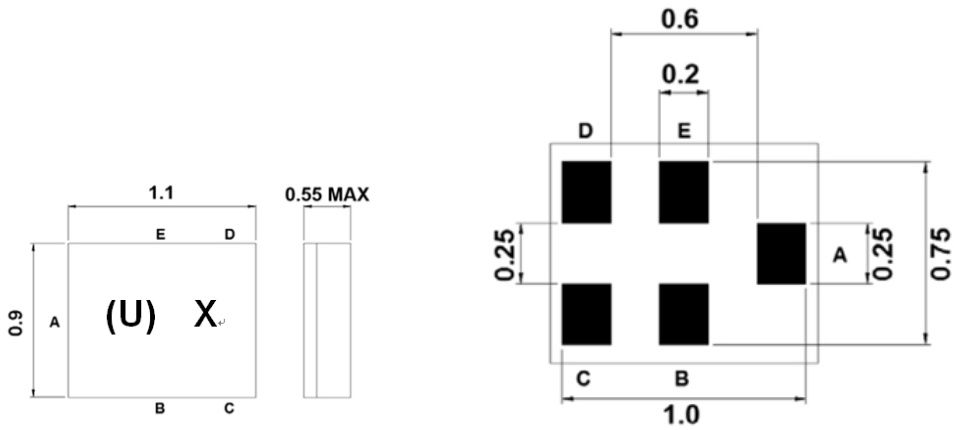
---

**Electrical Specification**

Parameters Description	Unit	Minimum	Typical @+25°C	Maximum
Center Frequency (Fo)	MHz	-	1842.5	-
Insertion Loss within 1805.0 ~ 1880.0 MHz	dB	-	2.9	4.5
Amplitude Ripple within 1805.0 ~ 1880.0 MHz	dB <sub>p-p</sub>	-	1.6	3.3
Input VSWR within 1805.0 ~ 1880.0 MHz	-	-	2.1	2.5
Output VSWR within 1805.0 ~ 1880.0 MHz	-	-	2.1	2.3
Amplitude Balance within 1805.0 ~ 1880.0 MHz	dB	-1.3	-0.6/+1.0	+1.3
Phase Balance within 1805.0 ~ 1880.0 MHz	deg	-12	-3/+3	+12
<b>Attenuation:</b>				
10.0 ~ 1300.0 MHz	dB	40	58	-
1300.0 ~ 1705.0 MHz	dB	40	53	-
1705.0 ~ 1785.0 MHz	dB	38	45	-
1920.0 ~ 1980.0 MHz	dB	24	28	-
1980.0 ~ 3000.0 MHz	dB	30	38	-
3000.0 ~ 5000.0 MHz	dB	30	58	-
5000.0 ~ 6000.0 MHz	dB	30	46	-

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

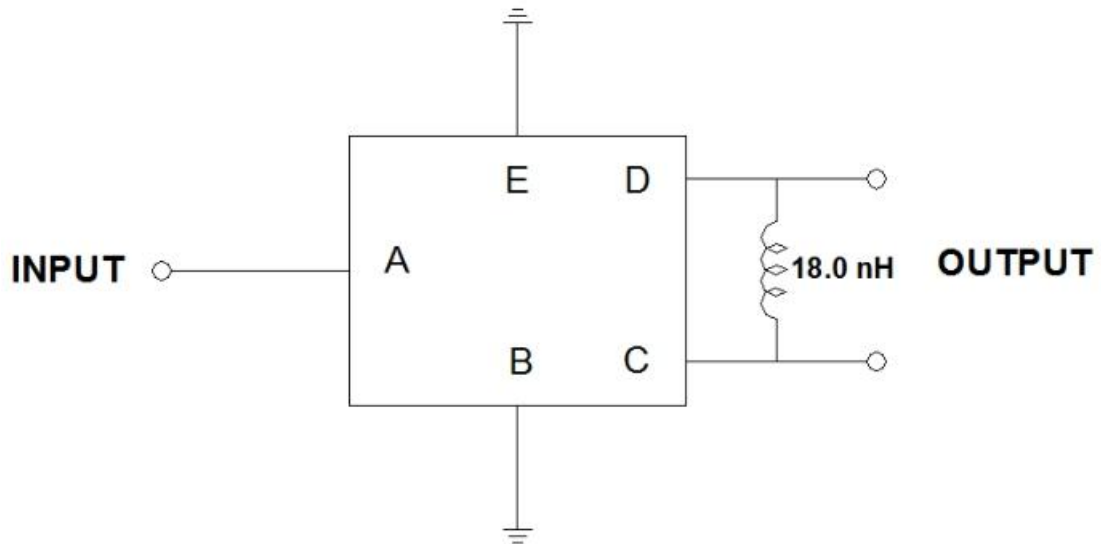
## Package Dimensions



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

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

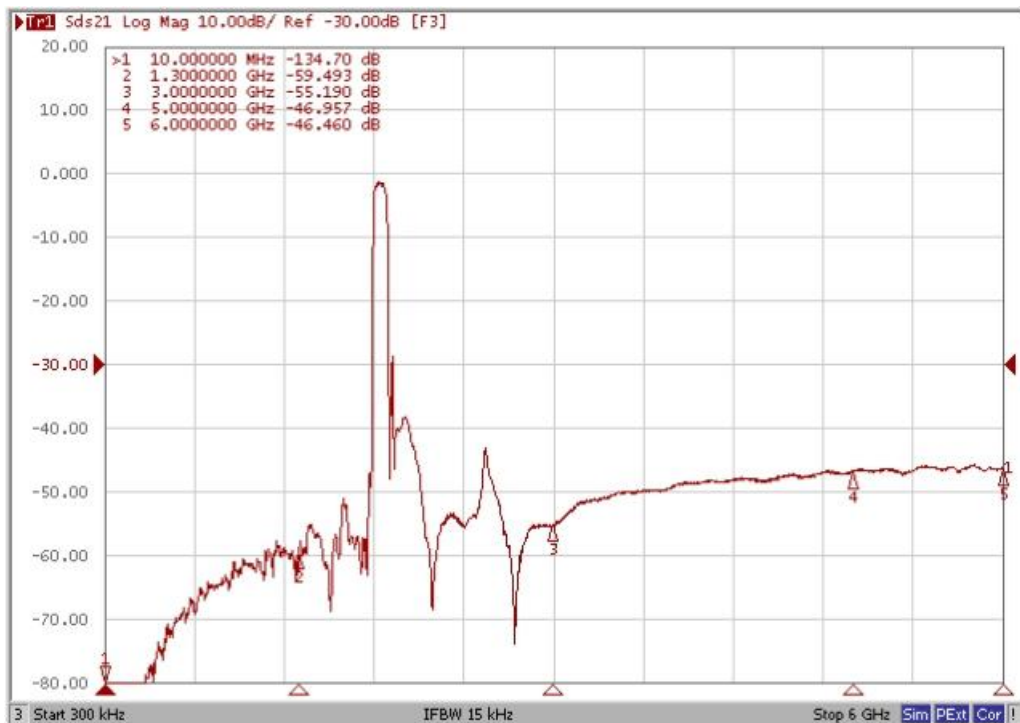
## Testing Environment



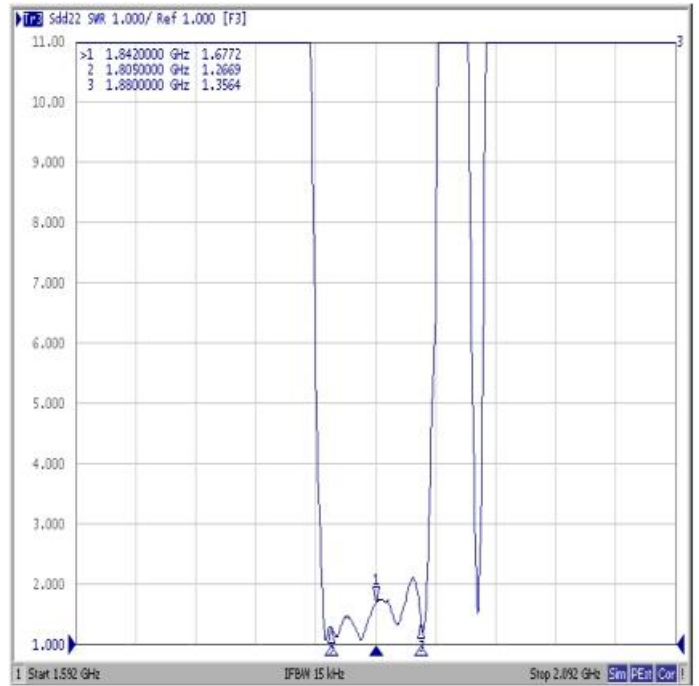
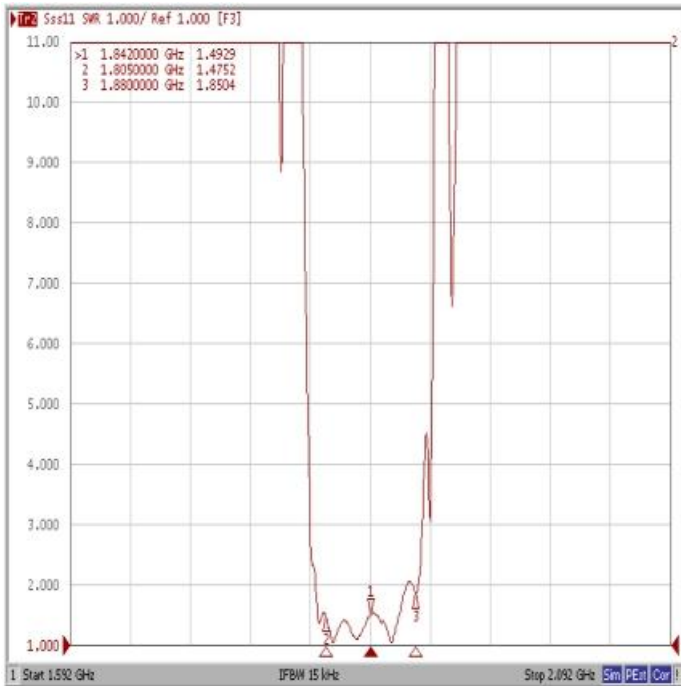
Source Impedance : 50  
 Load Impedance : 100

## □ Frequency Characteristics

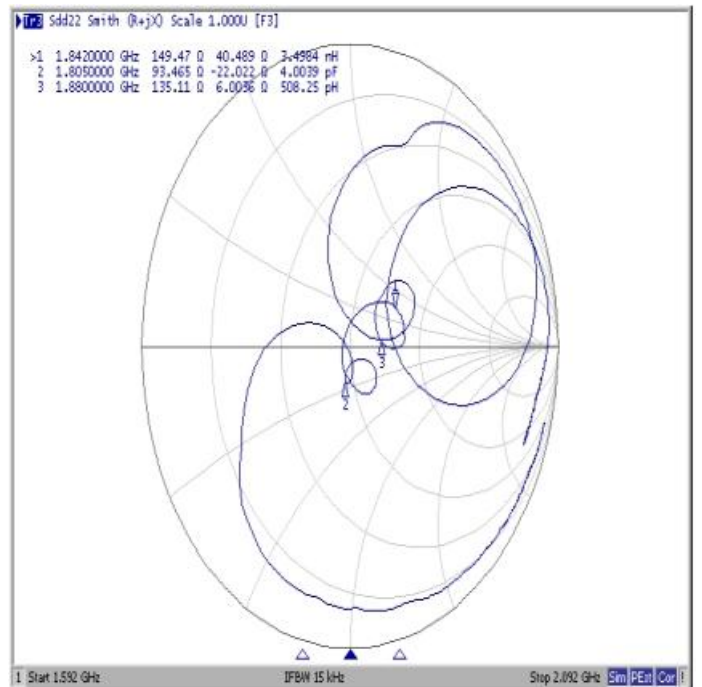
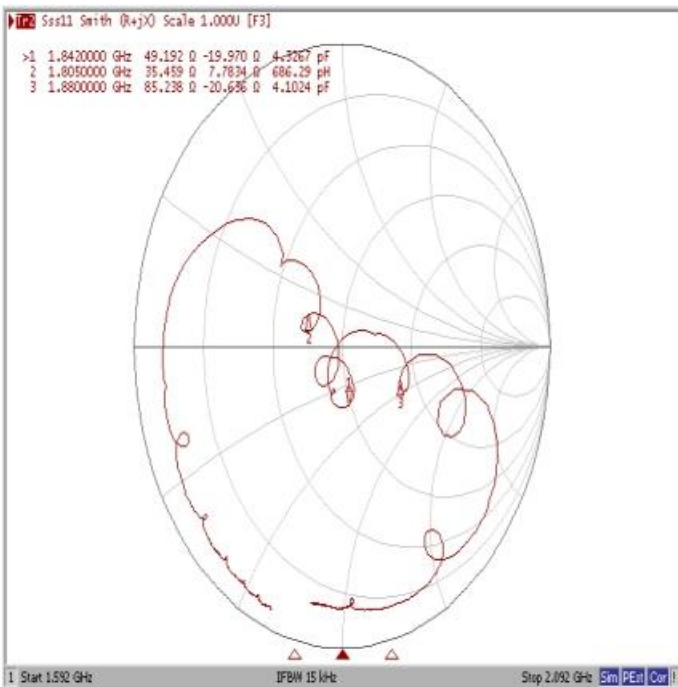
Frequency Response



**VSWR**



**Smith Chart**



### Amplitude balance



### Phase balance

