
SK3525HS

GNSS(L2+L5+B2), RF SAW Filter
Unbalanced / 5pin / 1109

Rev 1.0

MSL 3 Device



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

□ Electrical Characteristics

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	+85
Storage Temperature Range	°C	-40	-	+100
Carrier Tape Storage Temperature Range	°C	-5	-	+40
Maximum Input Power	dBm	-	-	10
Input Impedance	Ω	50 // 8.2nH		
Output Impedance	Ω	50 // 8.2nH		
Length x Width	mm ²	1.1 x 0.9		
Height	mm	-	-	0.5

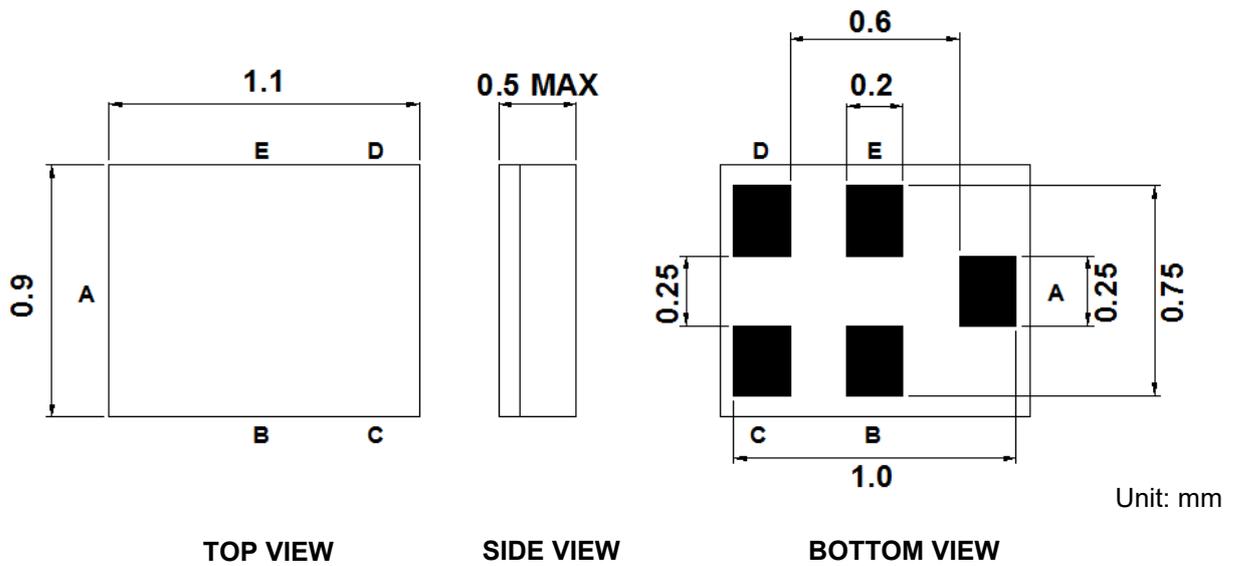
□ Electrical Characteristics

Electrical Specification

GNSS(L2+L5+B2) Filter		Specifications			
Parameters Description		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	-	1207.5	-
Insertion Loss (GPS L5)	1166.22 ~ 1186.68 MHz	dB	-	1.1	1.4
Insertion Loss (BD B2)	1205.094 ~ 1209.186 MHz	dB	-	1.0	1.4
Insertion Loss (GPS L2)	1226.577 ~ 1228.623 MHz	dB	-	1.3	1.6
Ripple	1166.22 ~ 1186.68 MHz	dB	-	0.3	1.6
	1205.094 ~ 1209.186 MHz	dB	-	0.2	0.6
	1226.577 ~ 1228.623 MHz	dB	-	0.1	0.8
Attenuation	638.0 ~ 698.0 MHz	dB	35	43	-
	698.0 ~ 748.0 MHz	dB	35	43	-
	777.0 ~ 798.0 MHz	dB	35	41	-
	807.0 ~ 915.0 MHz	dB	32	34	-
	925.0 ~ 960.0 MHz	dB	32	34	-
	1427.0 ~ 1463.0 MHz	dB	32	36	-
	1626.5 ~ 1660.5 MHz	dB	32	40	-
	1695.0 ~ 1785.0 MHz	dB	35	35	-
	1850.0 ~ 2025.0 MHz	dB	32	38	-
	2300.0 ~ 2400.0 MHz	dB	31	34	-
	2400.0 ~ 2483.0 MHz	dB	31	33	-
	2496.0 ~ 2690.0 MHz	dB	30	32	-
	3400.0 ~ 3800.0 MHz	dB	24	27	-
	4400.0 ~ 4900.0 MHz	dB	19	27	-
5150.0 ~ 5925.0 MHz	dB	19	27	-	
Input VSWR	1166.22 ~ 1186.68 MHz	-	-	1.2	2.0
	1205.094 ~ 1209.186 MHz	-	-	1.2	2.0
	1226.577 ~ 1228.623 MHz	-	-	1.1	2.0
Output VSWR	1166.22 ~ 1186.68 MHz	-	-	1.2	2.0
	1205.094 ~ 1209.186 MHz	-	-	1.2	2.0
	1226.577 ~ 1228.623 MHz	-	-	1.1	2.0

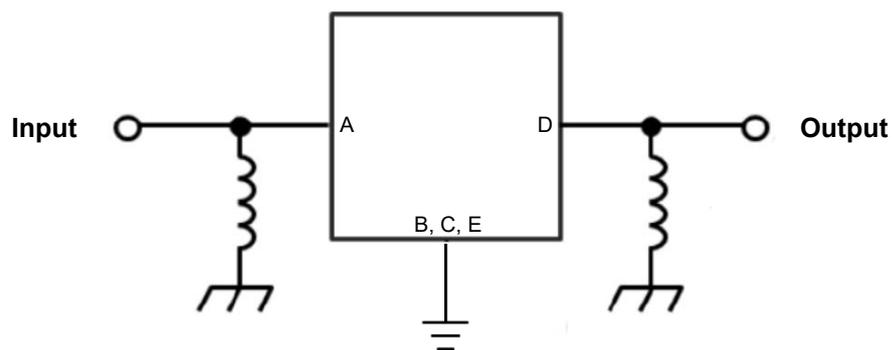
Note (1): With Matching Network .

Package Dimensions



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

Testing Environment

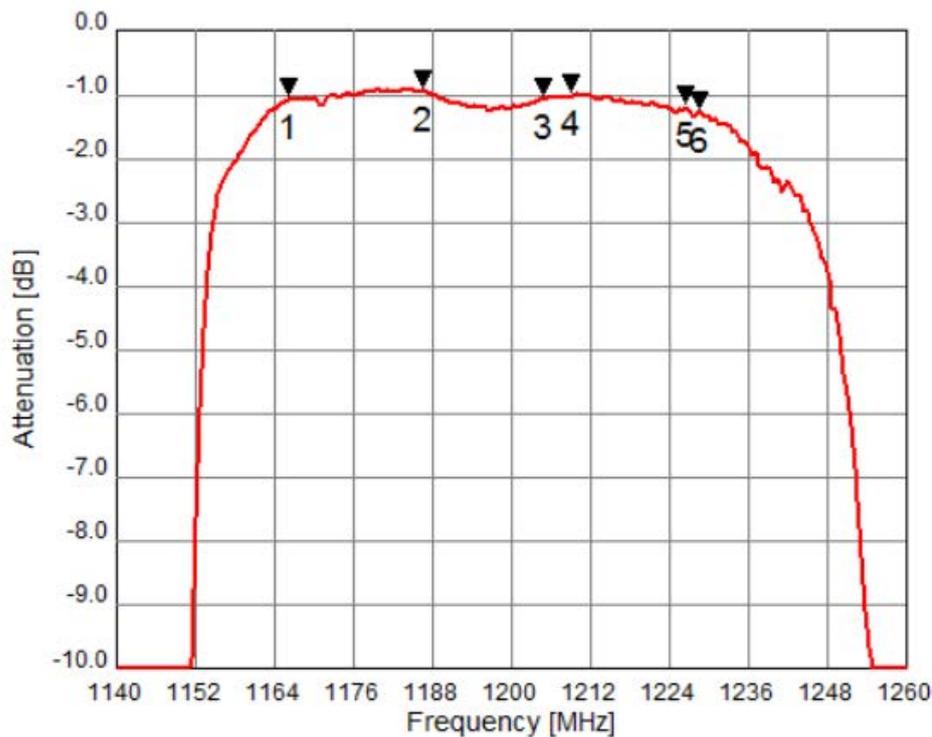
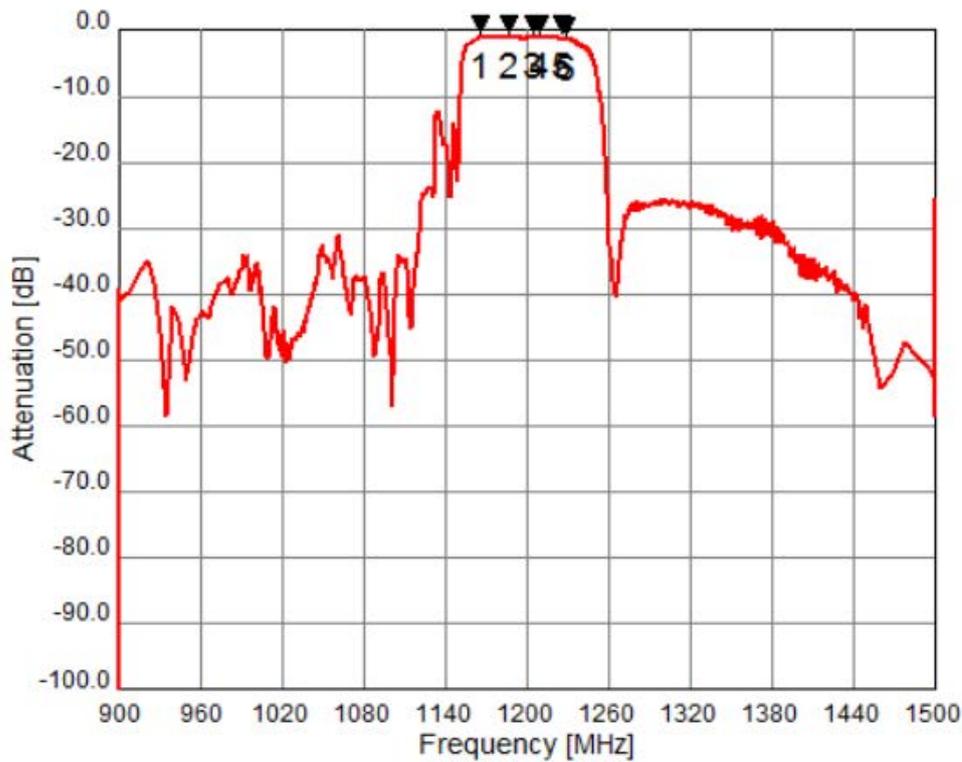


Source & Load Impedance: 50 Ω

Port	Matching Component
Input	L1 : 8.2 nH
Output	L2 : 8.2 nH

□ Frequency Characteristics

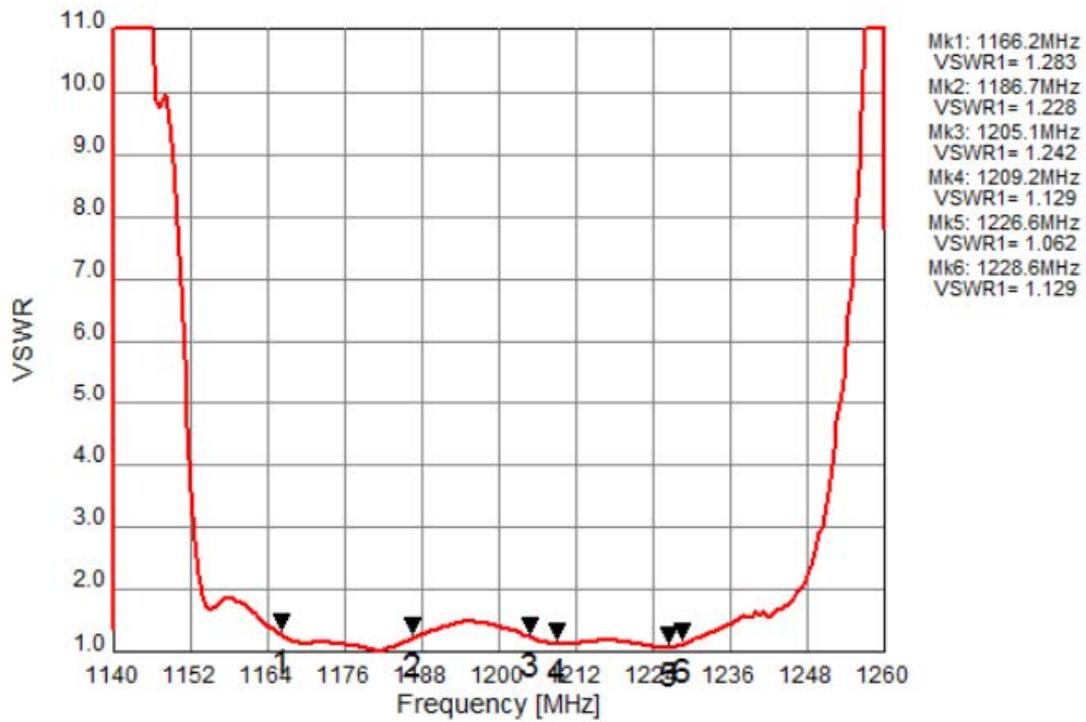
Frequency Response



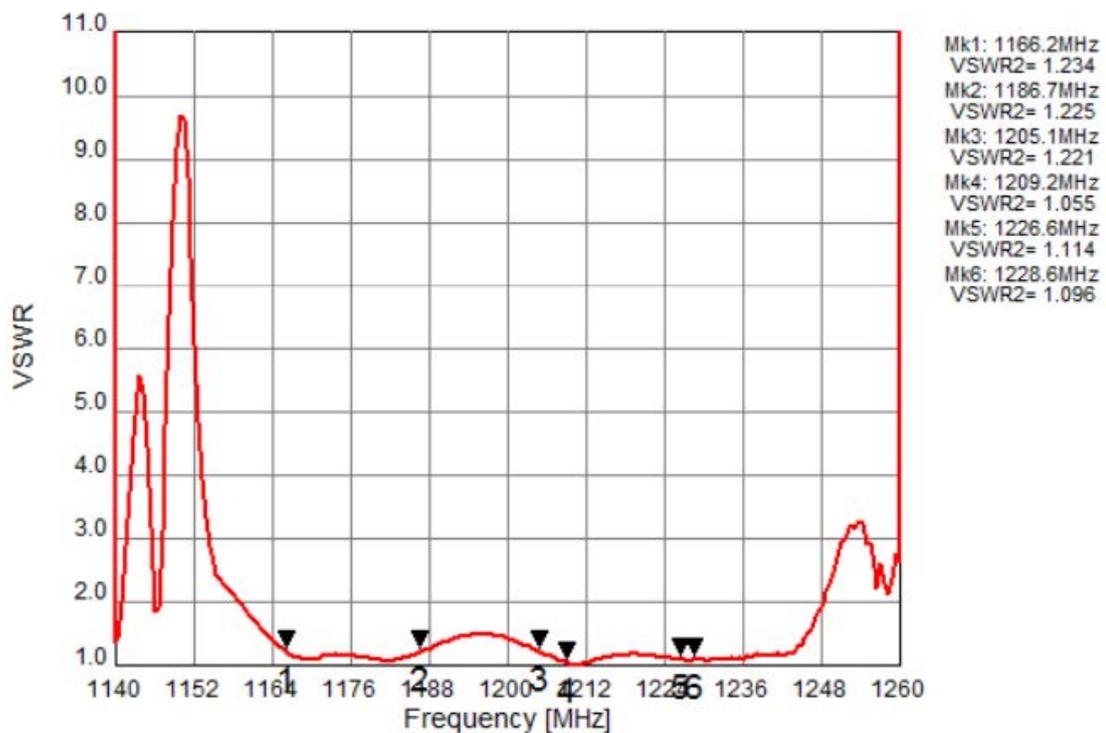
□ Frequency Characteristics

VSWR

Input Port



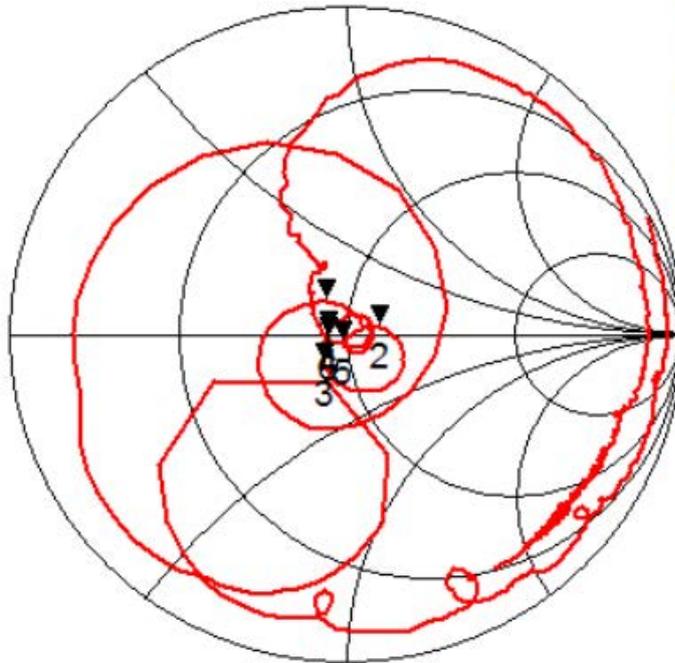
Output Port



□ Frequency Characteristics

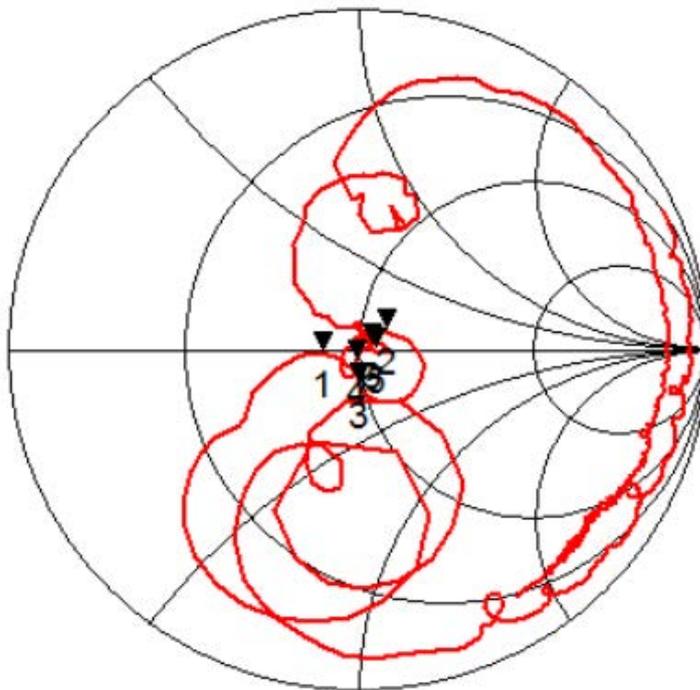
Smith Chart

Input Port



Mk1: 1166.2
 $S_{11} = 0.865 + j0.194$
 Mk2: 1186.7
 $S_{11} = 1.212 + j0.076$
 Mk3: 1205.1
 $S_{11} = 0.859 - j0.148$
 Mk4: 1209.2
 $S_{11} = 0.888 + j0.023$
 Mk5: 1226.6
 $S_{11} = 0.965 - j0.047$
 Mk6: 1228.6
 $S_{11} = 0.894 - j0.013$

Output Port



Mk1: 1166.2
 $S_{22} = 0.807 - j0.013$
 Mk2: 1186.7
 $S_{22} = 1.162 + j0.146$
 Mk3: 1205.1
 $S_{22} = 0.984 - j0.203$
 Mk4: 1209.2
 $S_{22} = 0.980 - j0.064$
 Mk5: 1226.6
 $S_{22} = 1.112 + j0.017$
 Mk6: 1228.6
 $S_{22} = 1.082 + j0.044$

□ Frequency Characteristics

Wide Span

