Document No. : SXC12671-01

KYOCERA SAW Filter

– 1109size GNSS SAW Filter –

L1+L5 Band Diplexer

Type Name : SF11-1197Y6UUA1

Oct., 30, 2025

KYOCERA Corporation

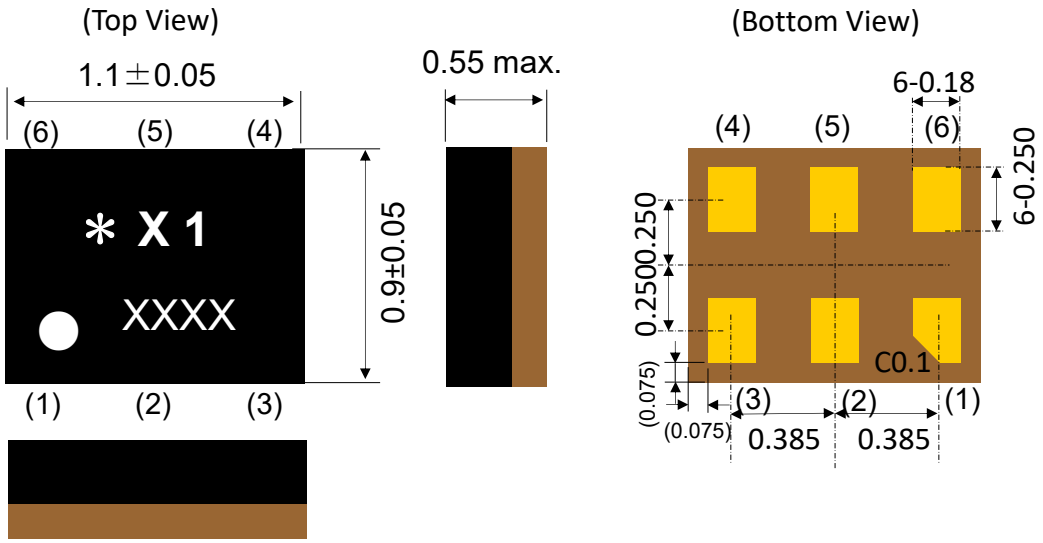
Corporate Electronic Components Group

Electronic Devices Division

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Dimensions & Test Circuit of SAW Filter

Dimensions

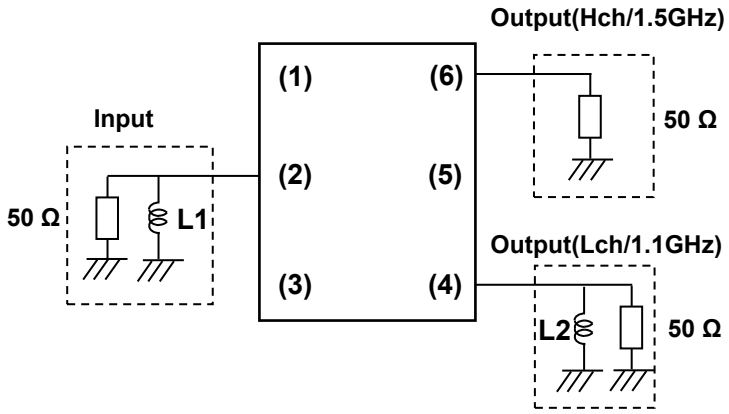


Unit	:	mm
＊	:	Identification mark
X1	:	Identification no.
●	:	Index mark of pin 1
XXXX	:	Production code

Pin allocation

Pin No.	Function
(1)	GND
(2)	Input
(3)	GND
(4)	Lch Output
(5)	GND
(6)	Hch Output

Test Circuit



L1 : 5.1nH (Ideal)
L2 : 9.4nH (Ideal)

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Rating

Items		Rating	Unit	Note
Operating Temperature Range		-40 to +85	deg.C	
Storage Temperature Range		-40 to +85	deg.C	
Max Input Power In Band		15	dBm	5,000Hours,Ta=50deg.C ,CW
ESD Level	Machine Model	50	Volt	Complied to JESD22-A115
Input Impedance		50//5.1nH	ohm	Unbalance
Output Impedance - Lch		50//9.4nH	ohm	Unbalance
Output Impedance - Hch		50	ohm	Unbalance

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Characteristic table

Items			Frequency[MHz]			Unit	Kyocera Specification			Note
							min	typ	max	
L1 1.5GHz	Insertion Loss		1559.05	-	1563.15	dB	-	1.5	2.3	B1
			1574.39	-	1576.45	dB	-	1.4	2.0	L1
			1597.55	-	1605.89	dB	-	1.7	2.3	G1
	VSWR	Input	1559.05	-	1605.89	-	-	1.4	2.2	
		Output	1559.05	-	1605.89	-	-	1.6	2.2	
	GDT Ripple Deviation		1597.55	-	1605.89	ns	-	2.4	9.0	
	Attenuation		10	-	699	dB	40	44	-	
			703	-	798	dB	38	42	-	
			814	-	915	dB	36	40	-	B26/ B8Tx
			1427	-	1463	dB	35	44	-	B11/ B21
			1710	-	1797	dB	42	47	-	B3Tx
			1850	-	1980	dB	40	46	-	B2Tx
			2010	-	2570	dB	40	46	-	B34Tx/ B30Tx/ 2.4G ISM/ B7Tx
			3300	-	4200	dB	30	37	-	N78, N77
			4400	-	5000	dB	27	37	-	N79
			5150	-	5950	dB	25	37	-	5G ISM
L5 1.1GHz	Insertion Loss		1166.22	-	1186.68	dB	-	0.8	1.8	L5
			1196.91	-	1217.37	dB	-	1.2	1.8	E5b
			1226.58	-	1228.62	dB	-	1.6	2.1	L2
	VSWR	Input	1166.22	-	1186.68	-	-	1.4	2.1	
			1196.91	-	1217.37	-	-	1.6	2.1	
			1226.58	-	1228.62	-	-	1.2	2.1	
		Output	1166.22	-	1186.68	-	-	1.4	2.1	
			1196.91	-	1217.37	-	-	1.5	2.1	
			1226.58	-	1228.62	-	-	1.2	2.1	
	GDT Ripple Deviation		1166.22	-	1186.68	ns	-	5.5	25.0	
			1196.91	-	1217.37	ns	-	3.2	25.0	
			1226.58	-	1228.62	ns	-	6.2	25.0	
	Attenuation		650	-	850	dB	30	38	-	
			850	-	950	dB	25	33	-	
			1427	-	1463	dB	25	30	-	B11/ B21
			1626	-	1661	dB	20	23	-	
			1710	-	2200	dB	26	33	-	B3/ B2
			2300	-	2690	dB	28	33	-	
			3300	-	4200	dB	25	31	-	N78, N77
			4400	-	5000	dB	25	31	-	N79
			5150	-	5950	dB	18	28	-	5G ISM

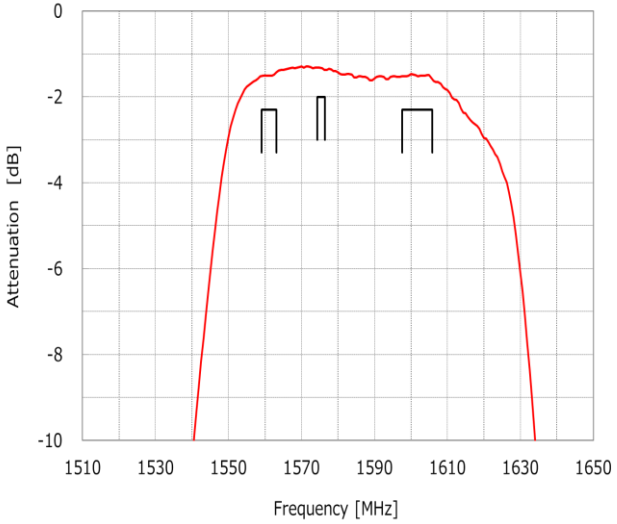
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Curve Data

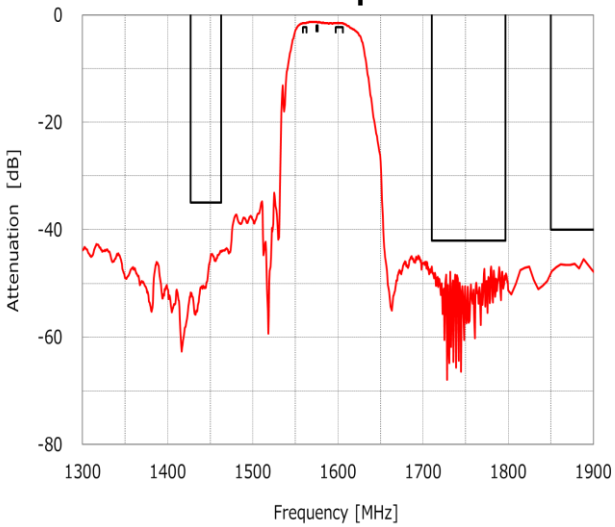
Ant to L1 1.5GHz

SF11-1197Y6UUA1 — Specification

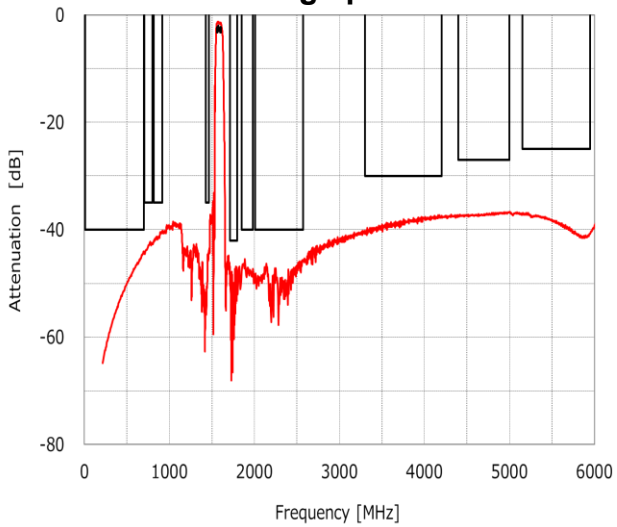
Pass Band



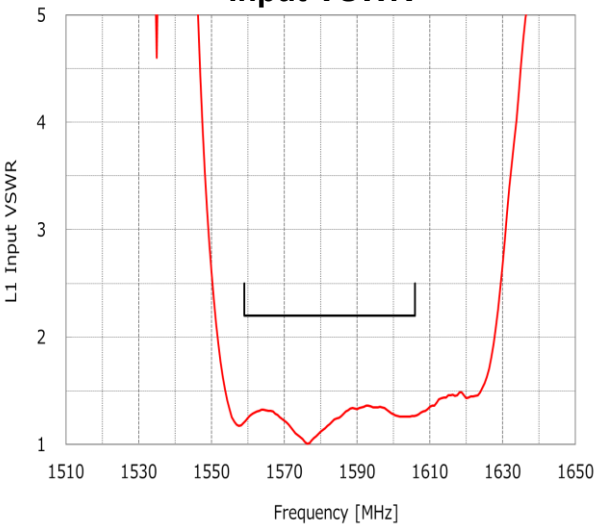
Short span



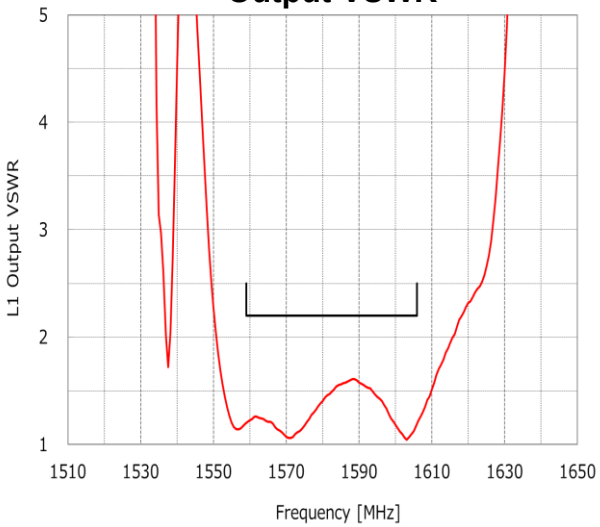
Long span



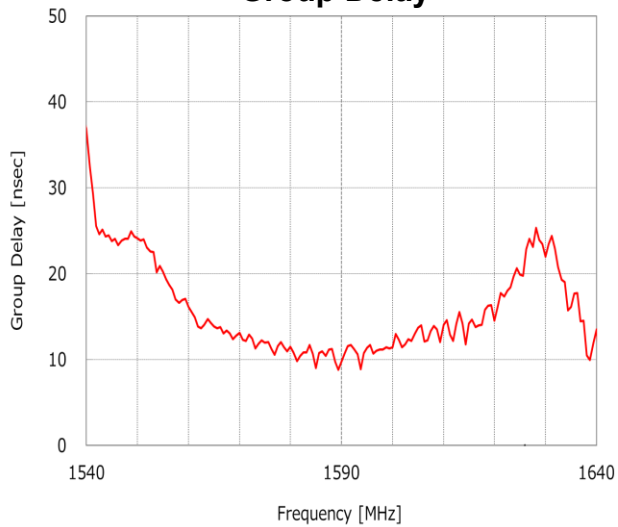
Input VSWR



Output VSWR



Group Delay



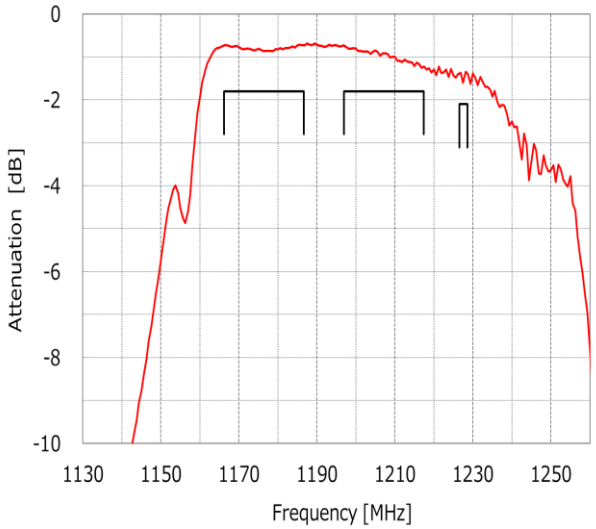
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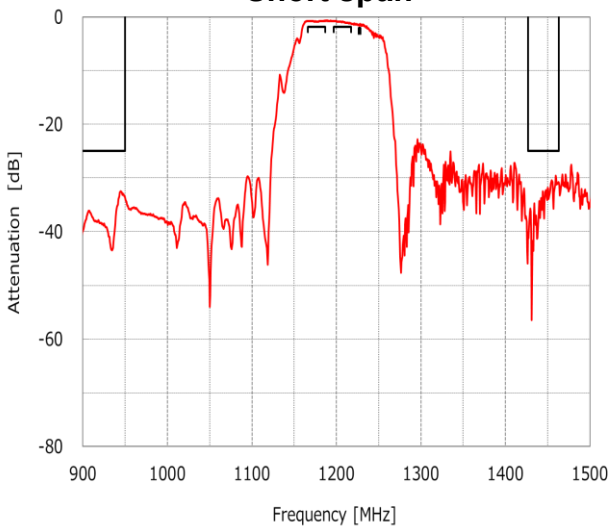
Ant to L5 1.1GHz

SF11-1197Y6UUA1 — Specification

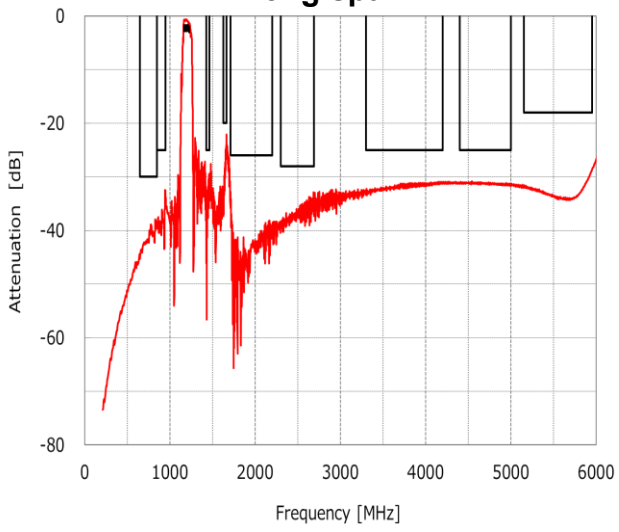
Pass Band



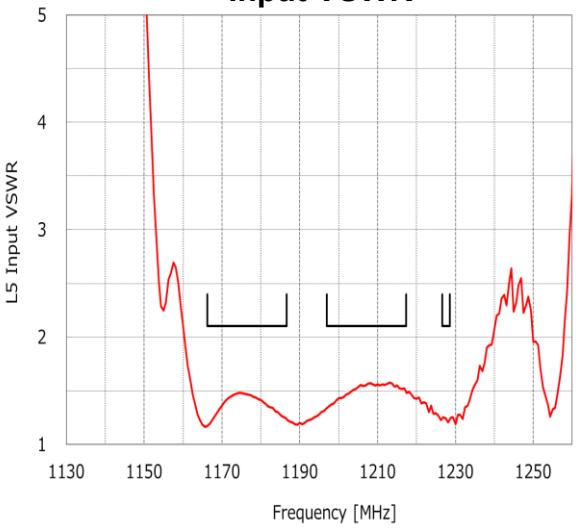
Short span



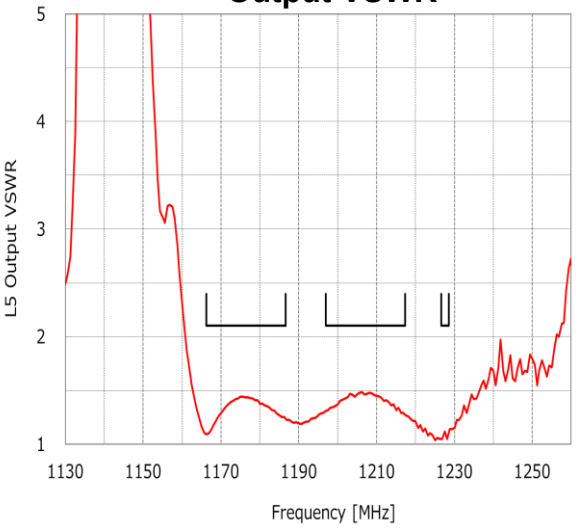
Long span



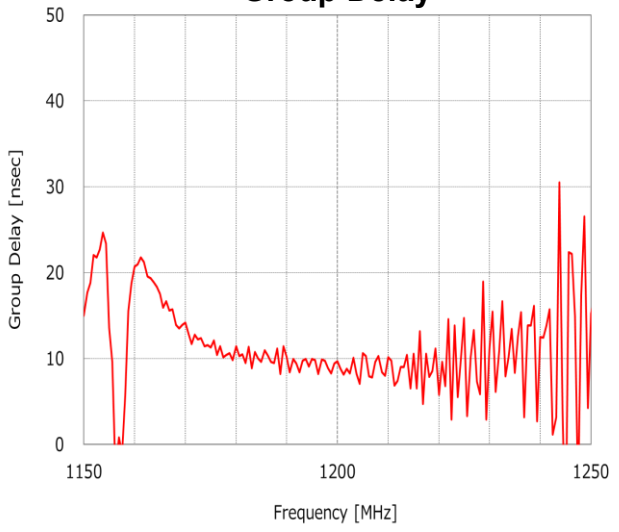
Input VSWR



Output VSWR



Group Delay



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