

Datasheet of SAW Diplexer

1511 GNSS

For GPS(L1) _GLONASS(G1)

For GPS(L5) _GALILEO(E5b) _GPS(L2)

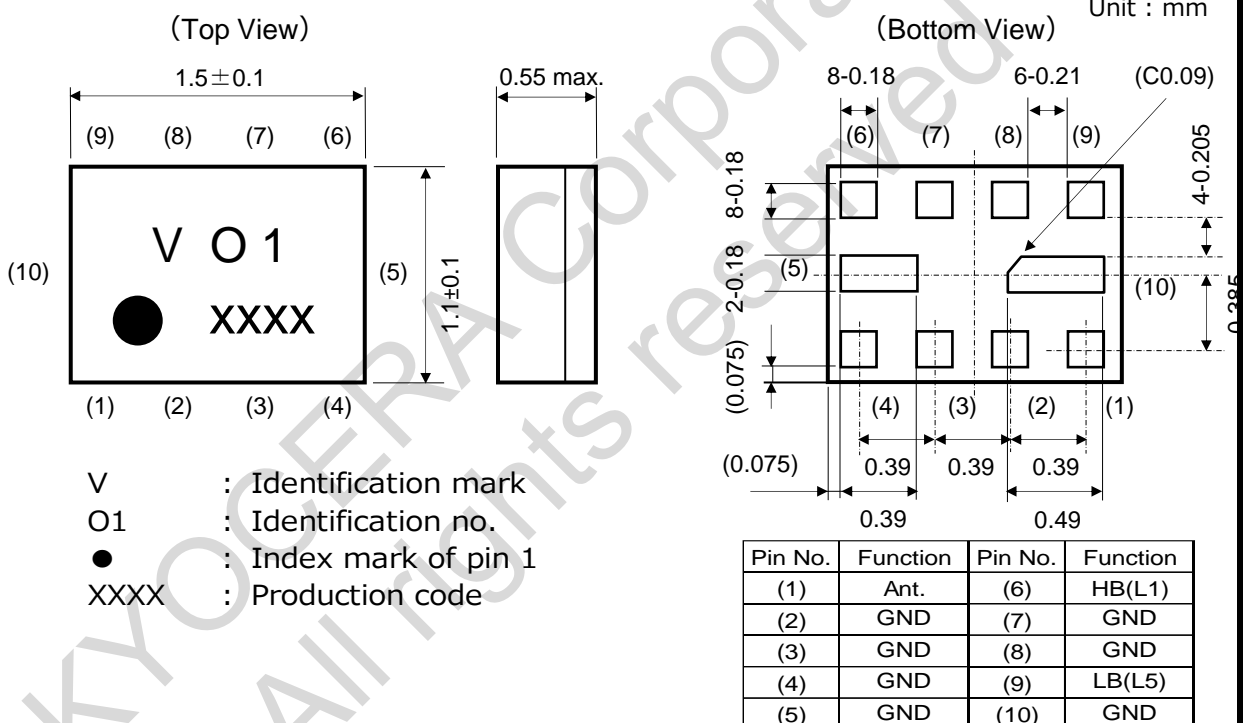
AEC-Q200 Grade2

KYOCERA Part No. : VF15-1197YAUUA1

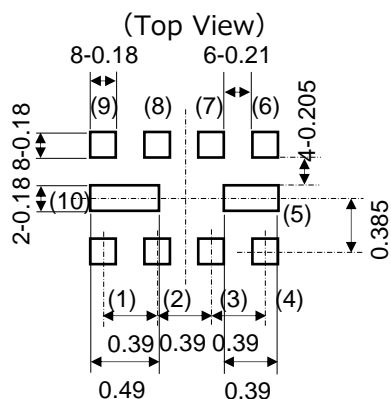
Rating

Items		Rating	Unit	Note
Operating Temperature Range		-40 to 105	deg.C	
Storage Temperature Range		-40 to 105	deg.C	
Max Input Power	Input port	15	dBm	5,000Hours, Ta=50deg.C, CW
ESDLevel	Human Body Model	100	Volt	Complied to JESD22-A114
Input Port Nominal Impedance (Ant)		50//3.9nH	ohm	Unbalance
Output Port Nominal Impedance (LB: L5)		50//7.5nH	ohm	Unbalance
Output Port Nominal Impedance (HB: L1)		50	ohm	Unbalance
AEC-Q200		Grade2		Complied to AEC-Q200

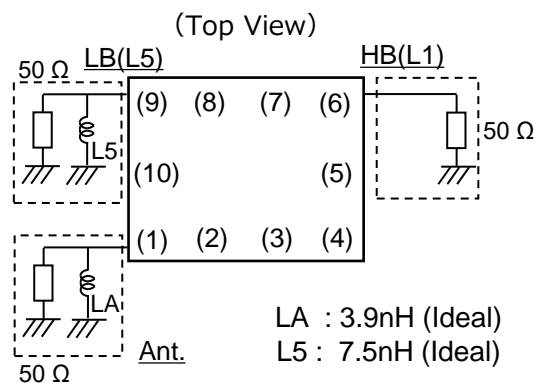
Dimensions



Recommendable Land Pattern



Measurement Circuit

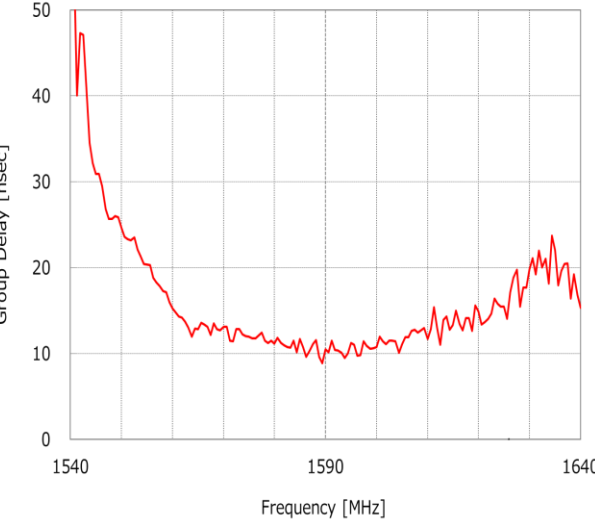
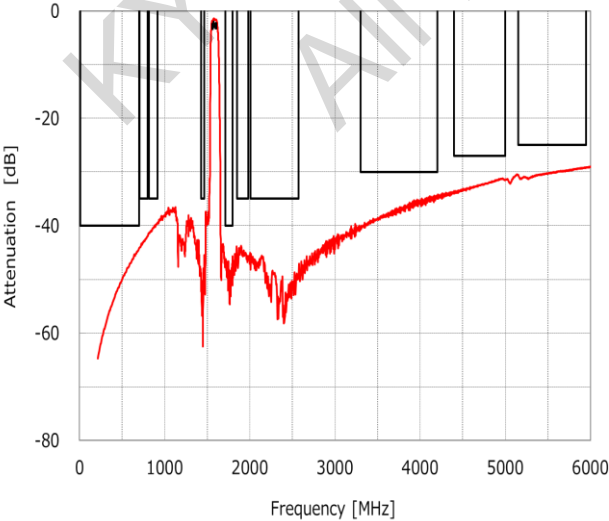
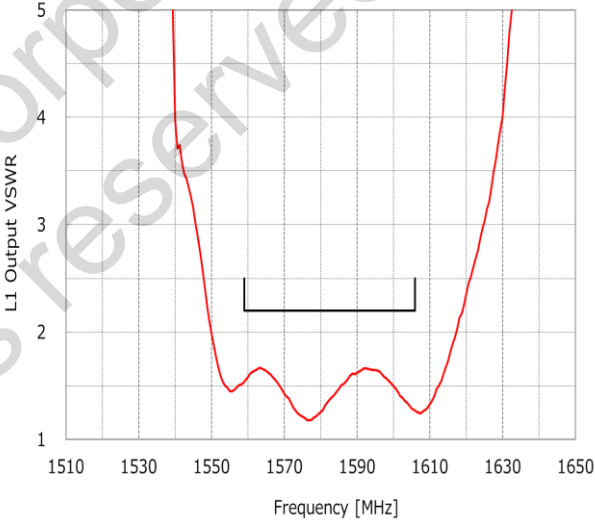
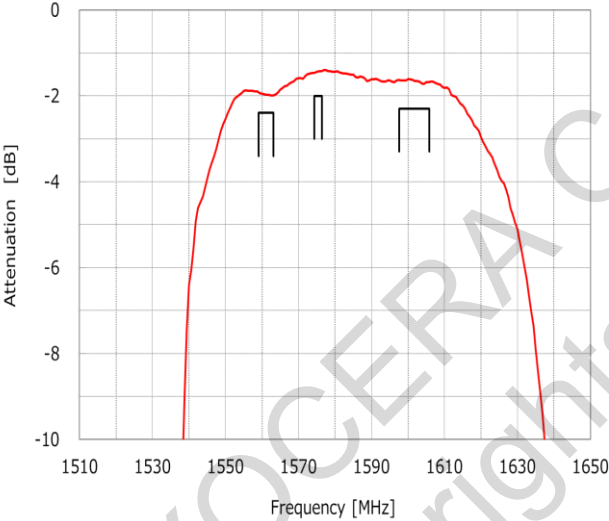
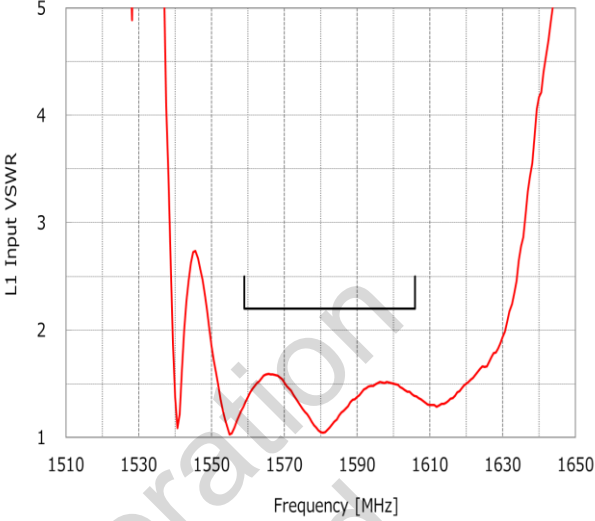
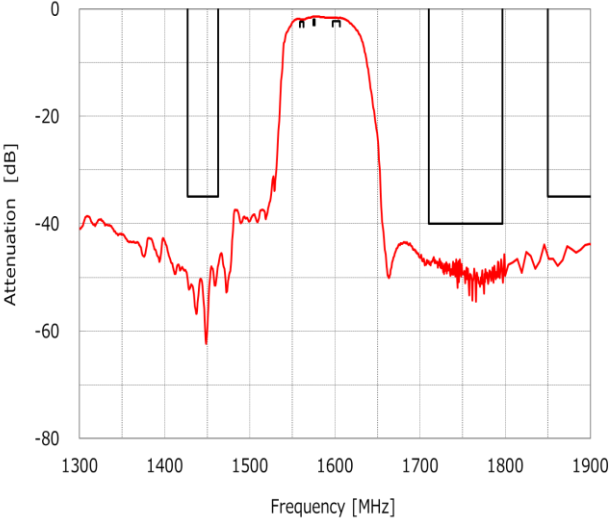


Electrical Characteristics

Items			Frequency[MHz]	Unit	Kyocera Specification			Note
					min	typ	max	
L1 1.5GHz	Insertion Loss		1559.05 - 1563.15	dB	-	2.0	2.4	
			1574.39 - 1576.45	dB	-	1.5	2.0	
			1597.55 - 1605.89	dB	-	1.7	2.3	
	VSWR	Input	1559.05 - 1605.89	-	-	1.6	2.2	
		Output	1559.05 - 1605.89	-	-	1.7	2.2	
	GDT Ripple Deviation		1597.55 - 1605.89	ns	-	3	15	
	Attenuation		10 - 699	dB	40	44	-	
			703 - 798	dB	35	42	-	
			814 - 915	dB	35	40	-	
			1427 - 1463	dB	35	48	-	
			1710 - 1797	dB	40	46	-	
			1850 - 1980	dB	35	44	-	
			2010 - 2570	dB	35	45	-	
			3300 - 4200	dB	30	34	-	
			4400 - 5000	dB	27	31	-	
		5150 - 5950	dB	25	29	-		
L5 1.1GHz	Insertion Loss		1166.22 - 1186.68	dB	-	1.2	2.3	L5
			1196.91 - 1217.37	dB	-	1.0	2.3	E5b
			1226.58 - 1228.62	dB	-	1.2	2.3	L2C
	VSWR	Input	1166.22 - 1186.68	-	-	1.4	2.2	L5
			1196.91 - 1217.37	-	-	1.5	2.2	E5b
			1226.58 - 1228.62	-	-	1.2	2.2	L2C
		Output	1166.22 - 1186.68	-	-	1.7	2.2	L5
			1196.91 - 1217.37	-	-	1.5	2.2	E5b
			1226.58 - 1228.62	-	-	1.2	2.2	L2C
	GDT Ripple Deviation		1166.22 - 1186.68	ns	-	17	35	L5
			1196.91 - 1217.37	ns	-	5	25	E5b
			1226.58 - 1228.62	ns	-	2	25	L2C
	Attenuation		650 - 850	dB	30	36	-	
			850 - 950	dB	25	33	-	
			1427 - 1463	dB	25	29	-	
1626 - 1661			dB	25	36	-		
1710 - 2200			dB	30	32	-		
2300 - 2690			dB	30	37	-		
3300 - 4200			dB	28	33	-		
4400 - 5000			dB	26	32	-		
5150 - 5950			dB	24	31	-		

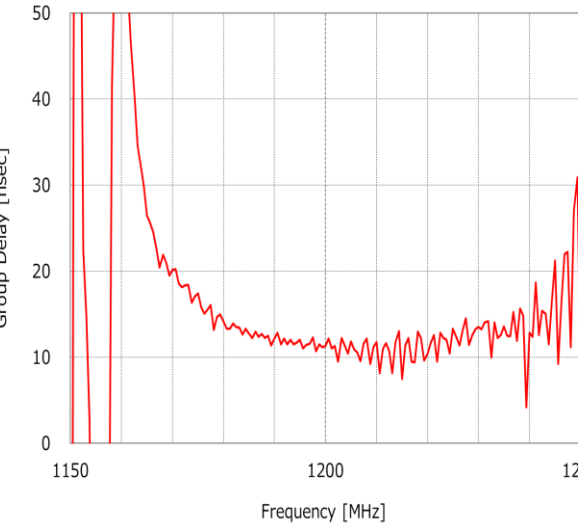
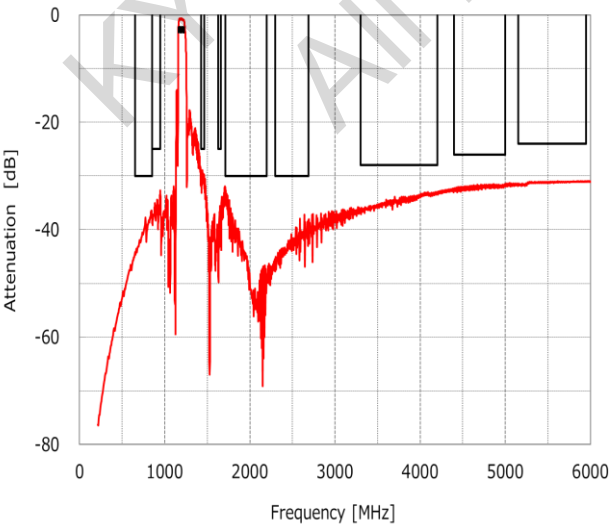
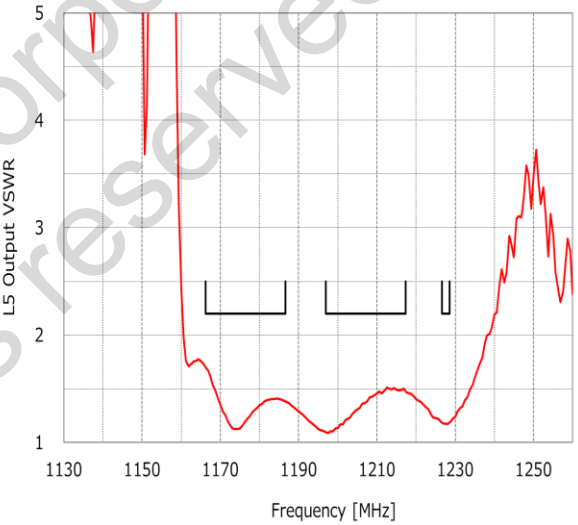
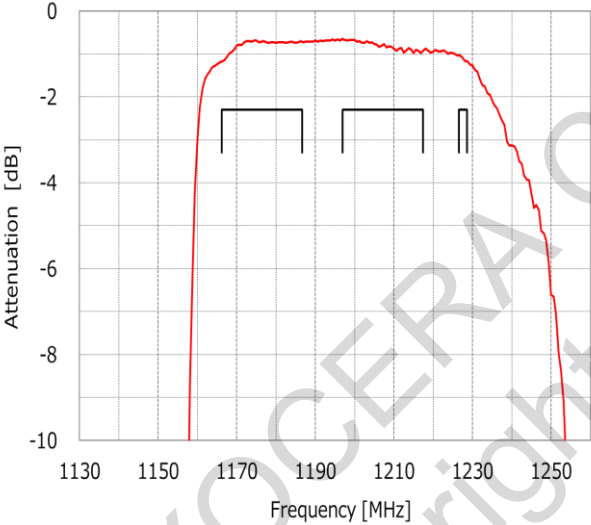
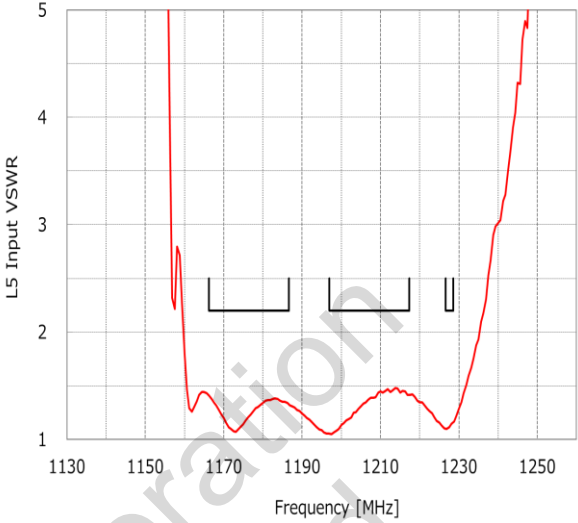
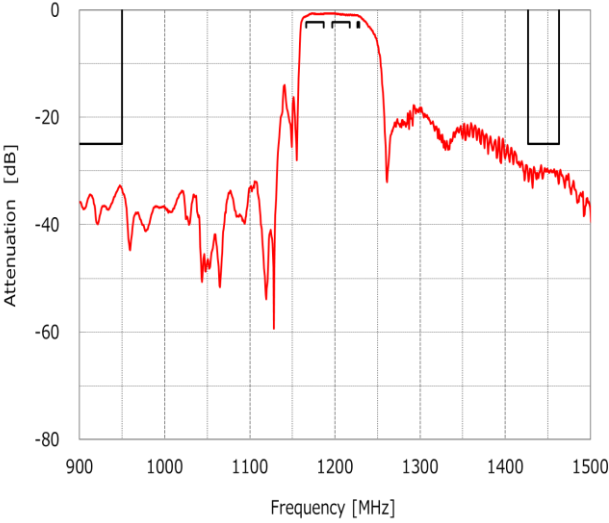
Electrical Characteristics L1(1.5GHz)

— VF15-1197YAUUA1
— Specification



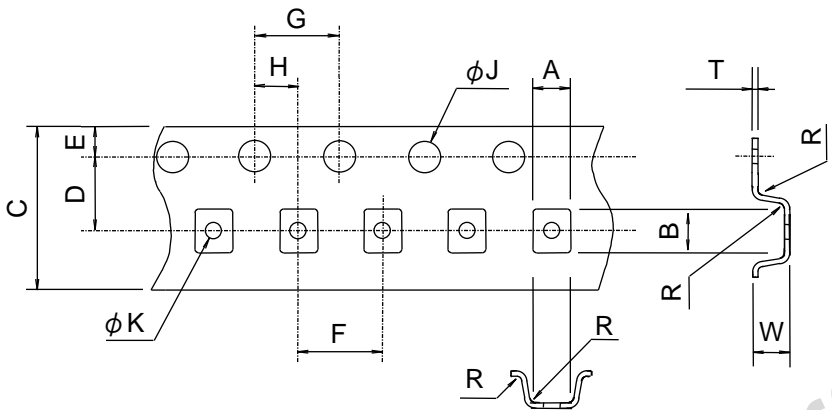
Electrical Characteristics L5(1.1GHz)

— VF15-1197YAUUA1
— Specification



Tape & Reel Specification

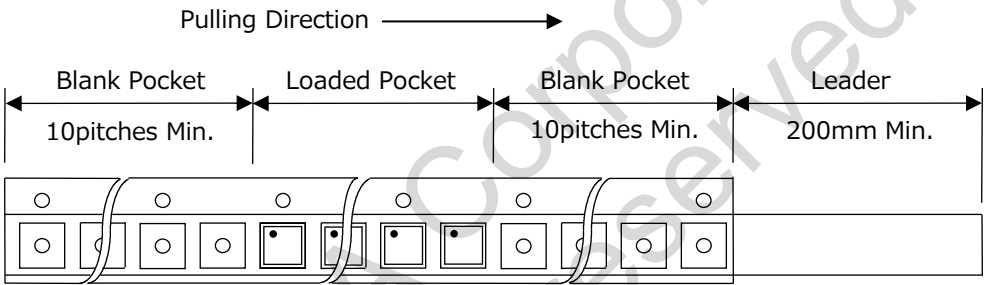
[Tape]



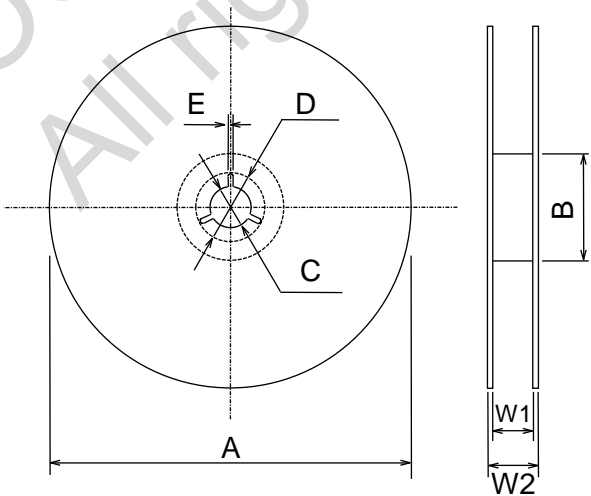
Unit : mm

Part	Dimension
A	1.4+0/-0.1
B	1.8±0.1
C	8.0±0.1
D	3.50±0.05
E	1.75±0.10
F	4.0±0.1
G	4.0±0.1
H	2.00±0.05
φJ	1.50+0.1/-0
φK	0.50±0.10
R	0.2 Max
W	0.70±0.1
T	0.20±0.05

W : Dimension is depth of pockets.



[Reel]



Part	A	B	C	D
Dimension	180 +0/-1.5	60 +1.0/-0	13 ± 0.2	21 ± 0.8
Part	E	W1	W2	
Dimension	2 ± 0.5	9.0 +1.0/-0	11.4 ± 1.0	

Unit : mm

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