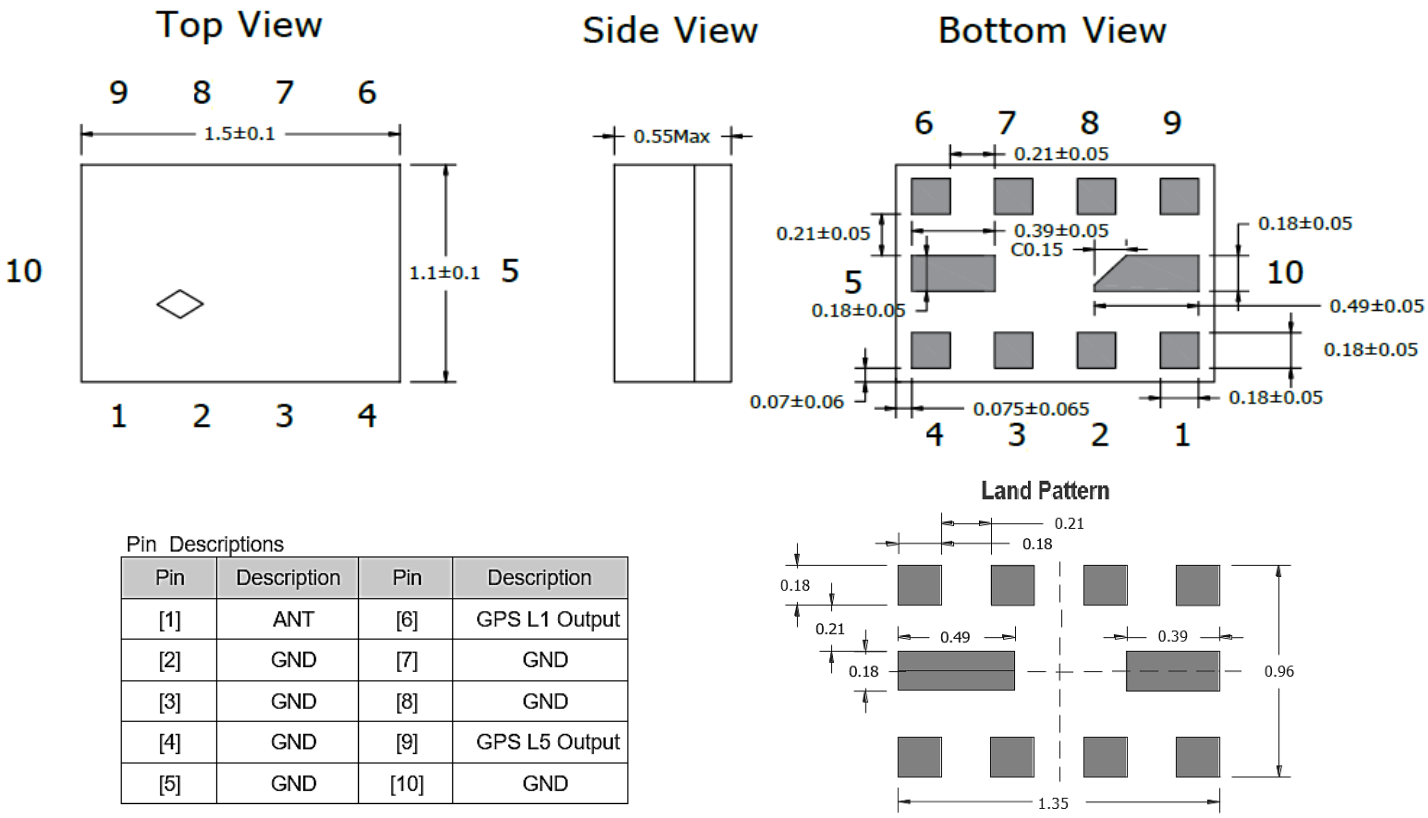
RSD-1176.500-1582.470-1511-W-TR

Electrical Specification

@ -30 ~ +85 °C

	Parameters		Value	Unit
GPS L1	Center Frequency		1582.470	MHz
	Insertion Loss, typ/max	1559.050 MHz ~ 1563.150 MHz	1.8 / 2.3	dB
		1574.390 MHz ~ 1576.450 MHz	1.4 / 1.9	dB
		1597.550 MHz ~ 1605.890 MHz	1.9 / 2.3	dB
	Pass Band Ripple, typ/max	1559.050 MHz ~ 1605.890 MHz	0.5 / 1.0	dB
	Group Delay Ripple, typ/max	1559.050 MHz ~ 1605.890 MHz	9 / 15	ns
	VSWR, typ/max Input / Output	1559.050 MHz ~ 1605.890 MHz	1.5 / 2.0	-
	Attenuation, min/typ	777.000 MHz ~ 787.000 MHz	36 / 45	dB
		814.000 MHz ~ 915.000 MHz	36 / 43	dB
		50.000 MHz ~ 925.000 MHz	35 / 42	dB
		925.000 MHz ~ 960.000 MHz	35 / 41	dB
		1427.000 MHz ~ 1463.000 MHz	34 / 43	dB
		1710.000 MHz ~ 1785.000 MHz	38 / 42	dB
		1786.000 MHz ~ 1797.000 MHz	37 / 41	dB
		1850.000 MHz ~ 1910.000 MHz	37 / 40	dB
		1910.000 MHz ~ 1980.000 MHz	38 / 42	dB
		2010.000 MHz ~ 2025.000 MHz	40 / 44	dB
		2305.000 MHz ~ 2315.000 MHz	40 / 46	dB
		2401.000 MHz ~ 2483.000 MHz	42 / 47	dB
		2500.000 MHz ~ 2570.000 MHz	40 / 48	dB
		5160.000 MHz ~ 5885.000 MHz	35 / 43	dB
GPS L5	Center Frequency		1176.500	MHz
	Insertion Loss, typ/max	1166.220 MHz ~ 1186.680 MHz	1.0 / 1.4	dB
	Pass Band Ripple, typ/max	1166.220 MHz ~ 1186.680 MHz	0.2 / 0.4	dB
	Group Delay Ripple, typ/max	1166.220 MHz ~ 1186.680 MHz	4 / 10	ns
	VSWR, typ/max Input / Output	1166.220 MHz ~ 1186.680 MHz	1.5 / 2.0	-
	Attenuation, min/typ	638.000 MHz ~ 748.000 MHz	35 / 42	dB
		777.000 MHz ~ 798.000 MHz	34 / 40	dB
		807.000 MHz ~ 915.000 MHz	32 / 37	dB
		925.000 MHz ~ 960.000 MHz	28 / 35	dB
		1427.000 MHz ~ 1463.000 MHz	31 / 37	dB
		1626.500 MHz ~ 1660.500 MHz	20 / 28	dB
		1695.000 MHz ~ 1785.000 MHz	30 / 39	dB
		1850.000 MHz ~ 2025.000 MHz	35 / 41	dB
		2300.000 MHz ~ 2400.000 MHz	40 / 48	dB
		2400.000 MHz ~ 2483.000 MHz	42 / 50	dB
		2596.000 MHz ~ 2690.000 MHz	42 / 51	dB
		3400.000 MHz ~ 3800.000 MHz	31 / 41	dB
		4400.000 MHz ~ 4900.000 MHz	29 / 38	dB
		5150.000 MHz ~ 5925.000 MHz	27 / 36	dB
Input Power, max (5000h), 55°C			15	dBm
Operating Temperature Range			-40 ~ +85	°C
Storage Temperature Range			-40 ~ +85	°C

Dimension



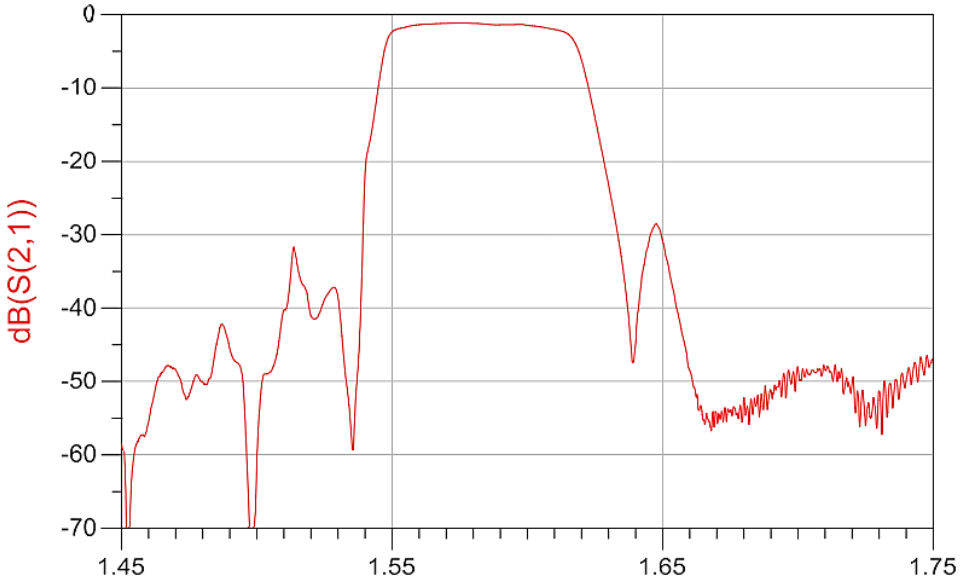
Pin Descriptions

Pin	Description	Pin	Description
[1]	ANT	[6]	GPS L1 Output
[2]	GND	[7]	GND
[3]	GND	[8]	GND
[4]	GND	[9]	GPS L5 Output
[5]	GND	[10]	GND

Unit: mm

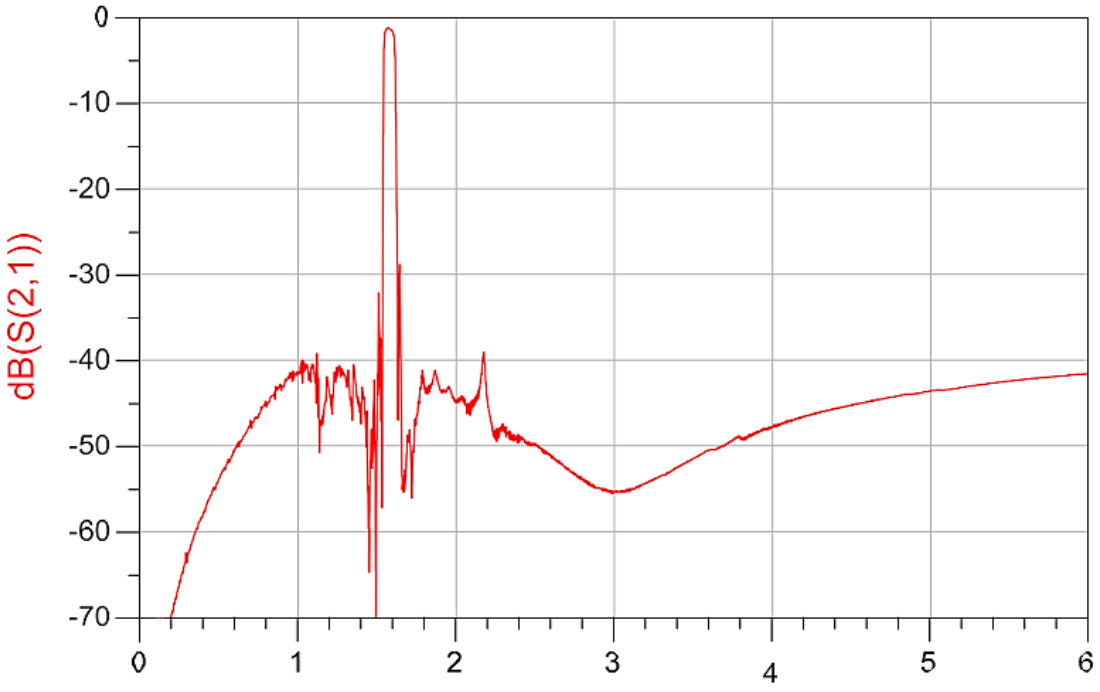
Frequency Characteristics

Insertion Loss (GPS L1)



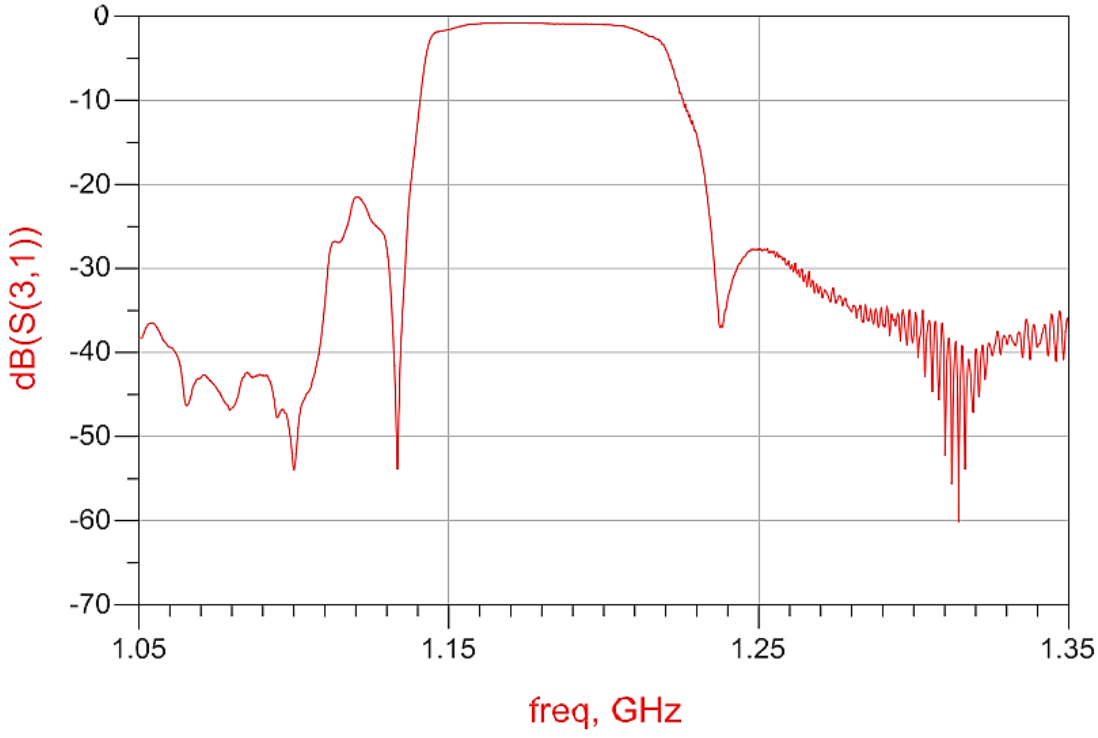
Attenuation, 1450 – 1750 MHz

Attenuation (GPS L1)



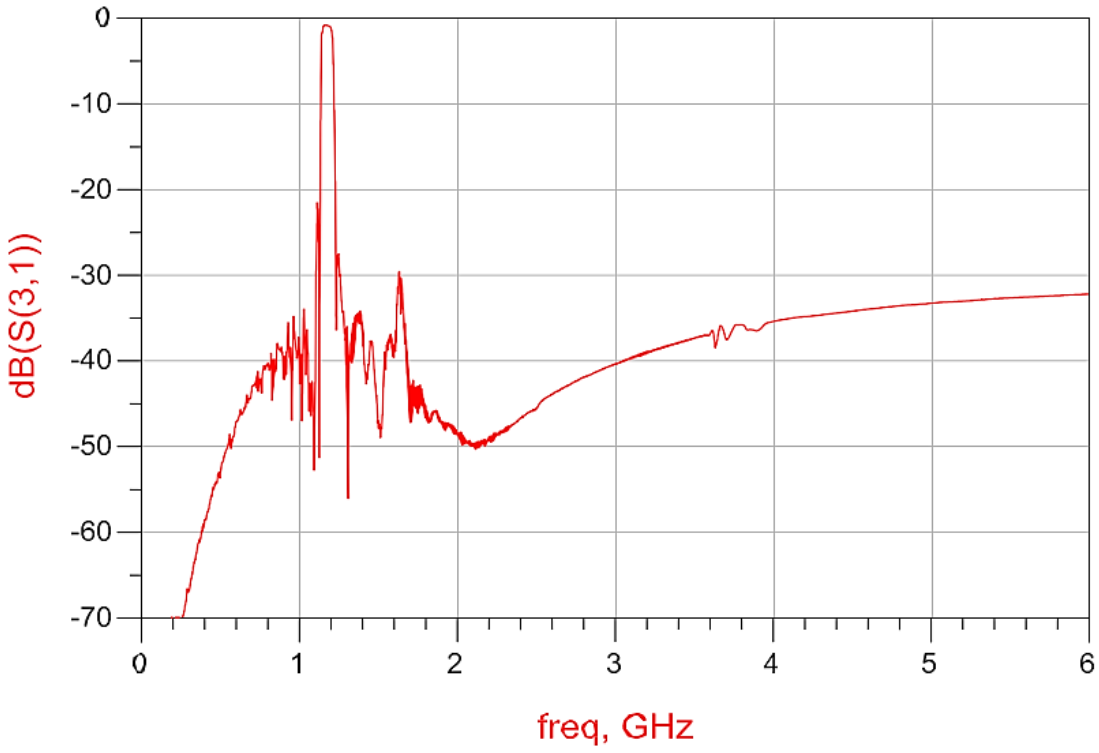
Attenuation, 10 – 6000 MHz

Insertion Loss (GPS L5)



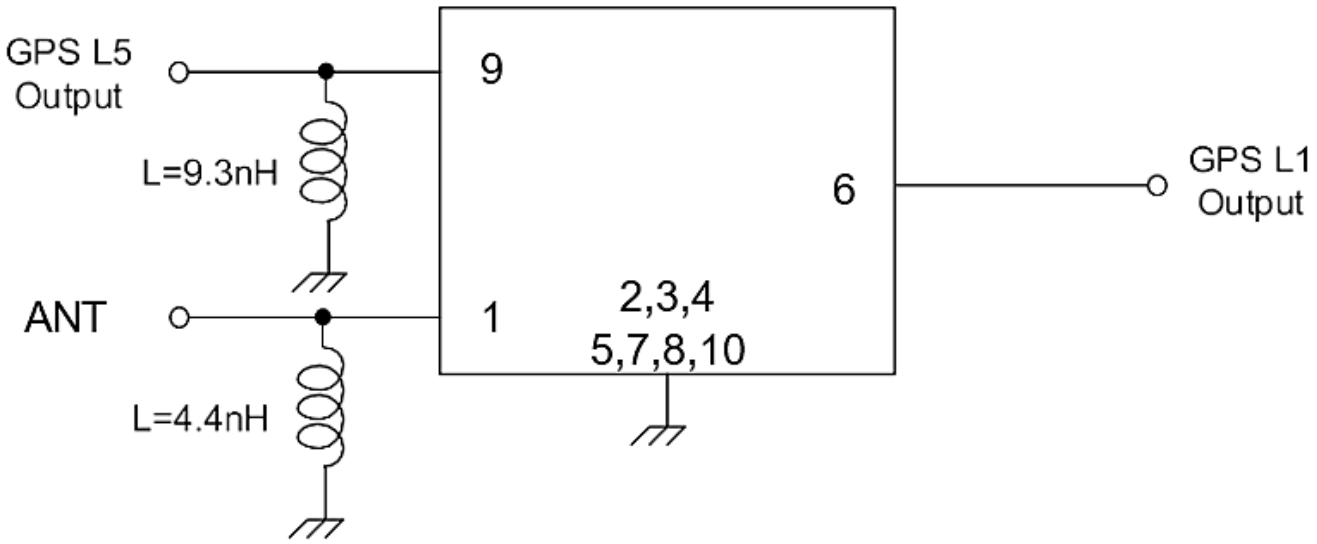
Attenuation, 1050 – 1350 MHz

Attenuation (GPS L5)



Attenuation, 10 – 6000 MHz

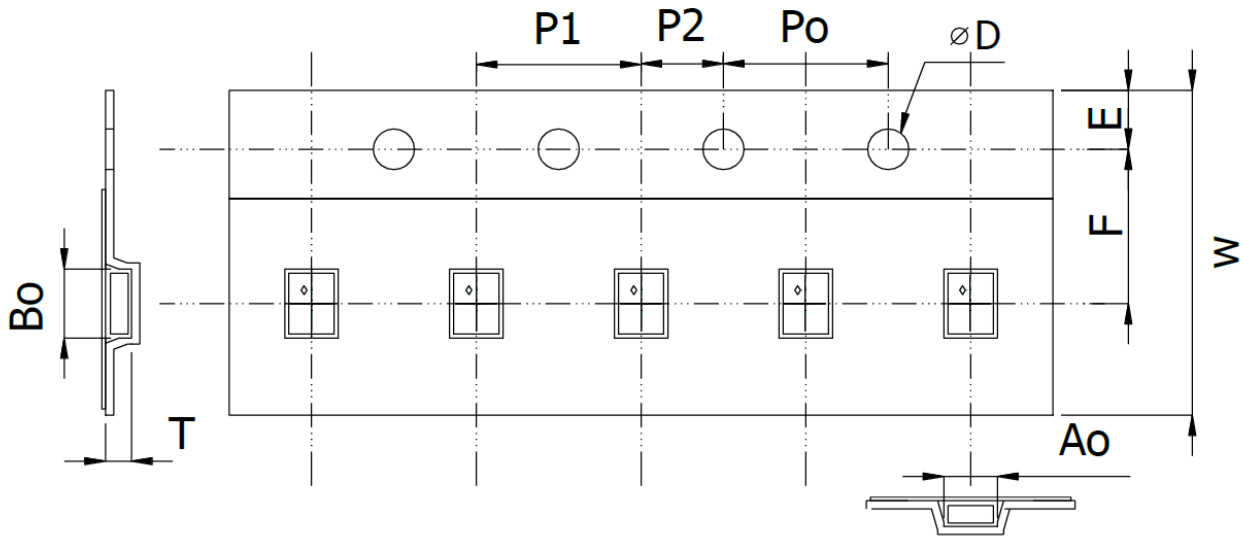
Test Circuit



Environmental

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	3
REACH – SVHC	Compliant
RoHS	Compliant

Tape Dimension



Plastic Tape specifications

Index	Ao	Bo	ΦD	T	W
Dimension (mm)	1.30±0.05	1.70±0.05	1.50+0.1/-0.0	0.74±0.05	8.00 +0.30/-0.10
Index	E	F	Po	P1	P2
Dimension (mm)	1.75±0.10	3.50±0.05	4.00±0.10	4.00±0.10	2.0±0.05

5000 pcs per reel

- **APPROVAL**

DRAWN BY	EV, June 3, 2026
APPROVED BY	AR, June 3, 2026
REVISION	A, Initial Release