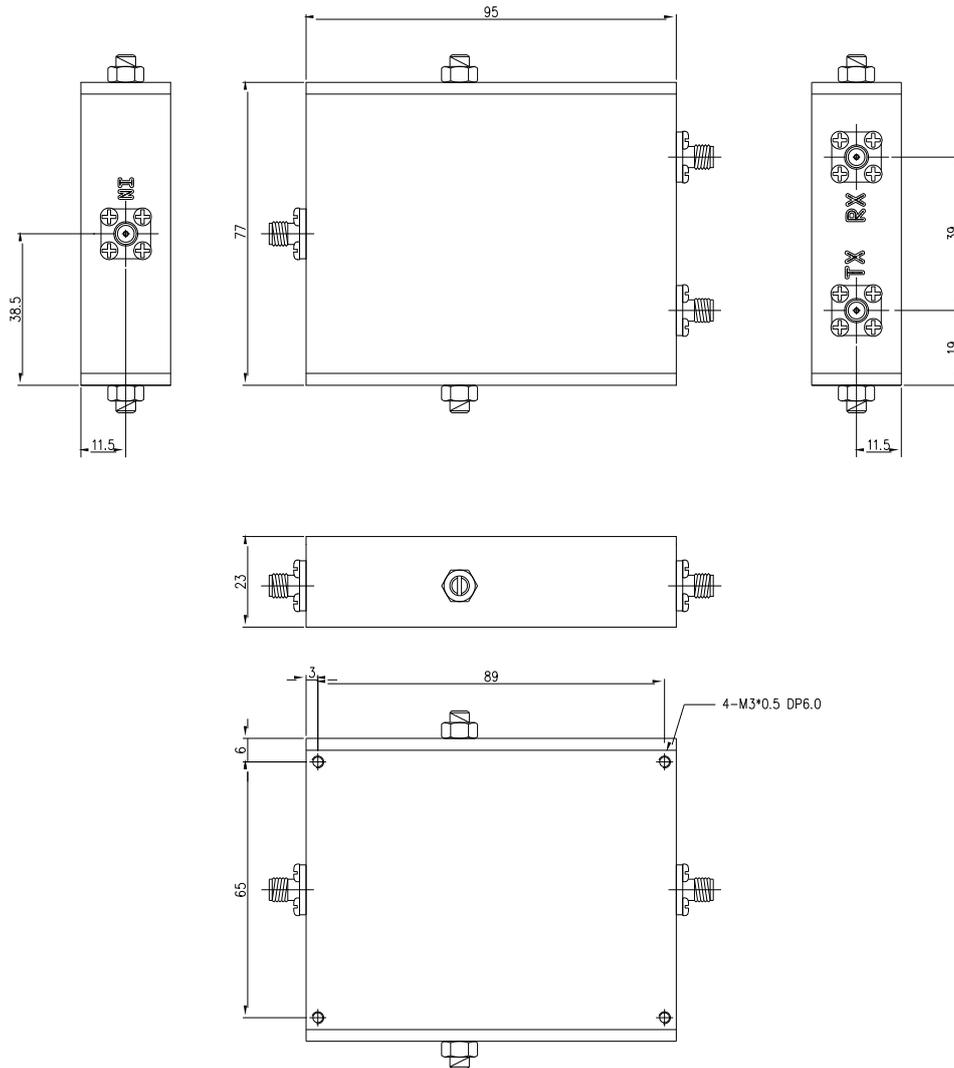


2019. 01. 28.

PRODUCT SPECIFICATION FOR INFORMATION

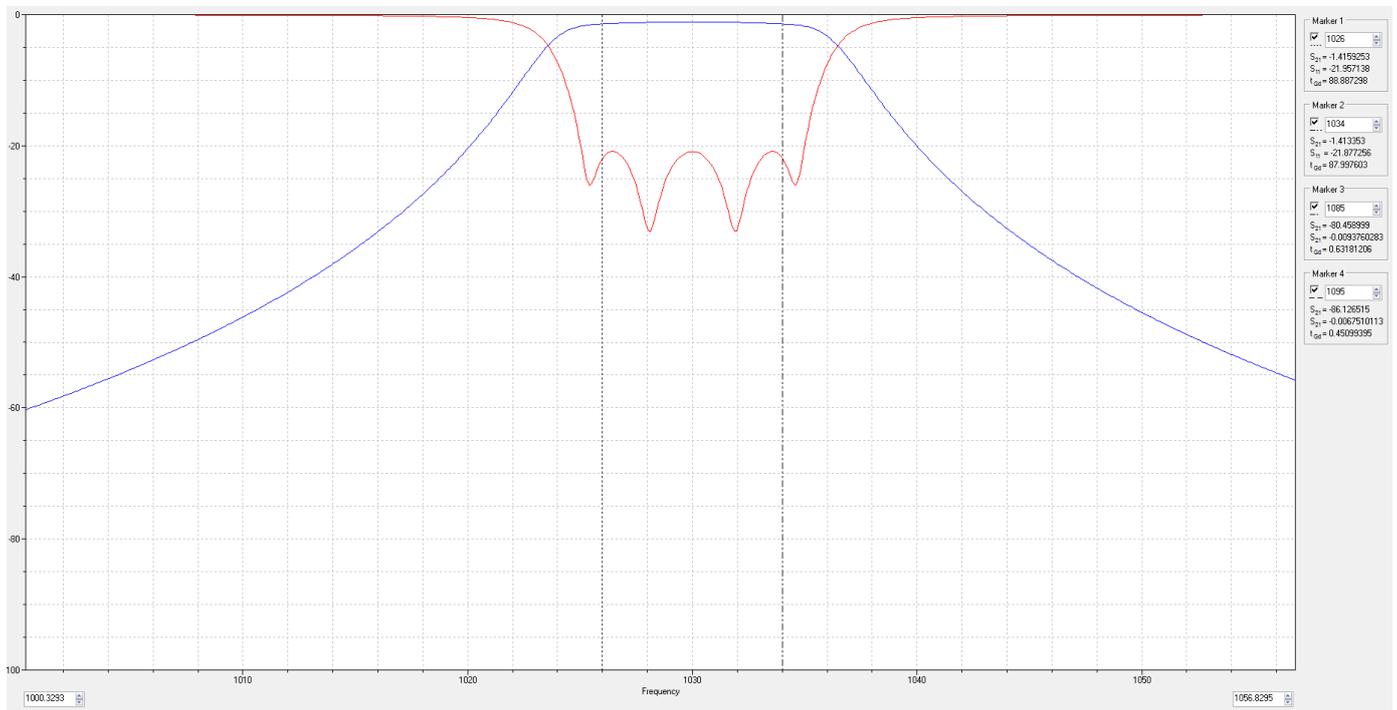
- Customer : BEL-B
- Product Name : CAVITY DIPLEXER
- Part No : MDP-C1030/1090BP8/10M



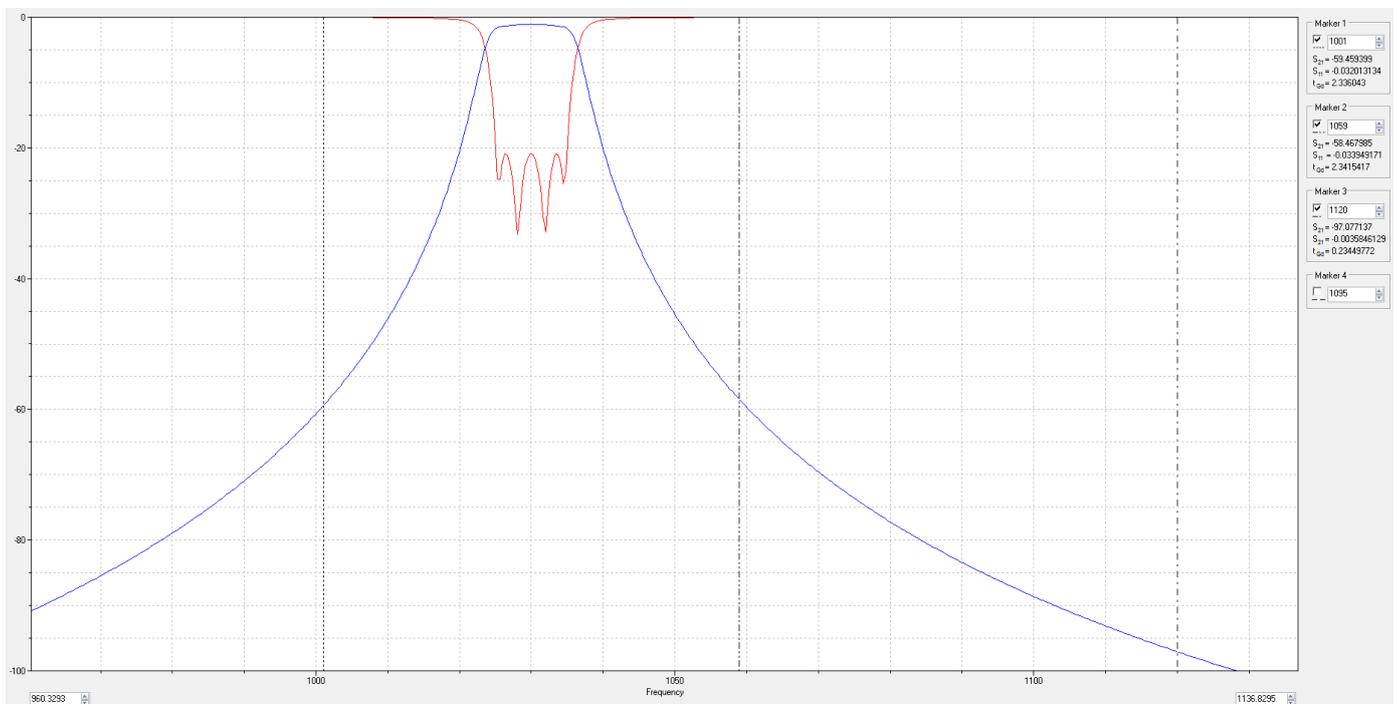
■ ELECTRICAL SPECIFICATION

Parameter	Specification		Remark
Band	RX	TX	
Center Frequency	1030MHz	1090MHz	
Band Width	1026 ~ 1034MHz	1085 ~ 1095MHz	
Insertion Loss	2.5dB Max.	1.0dB Max.	
Return Loss	20dB Min.		
Attenuation	35dB@1001MHz 35dB@1059MHz 35dB@1120MHz		
Isolation	60dB Min.		
Average Power Handling (CW)	60 Watt		
Peak Power Handling over 32uS	3000W		
In/Out Impedance	50Ω		
Connectors	SMA(F)		
Operating Temperature	-40°C to +85°C		
Dimension	95.0 X 77.0 X 23.0 mm		
Finish	Black epoxy coating		

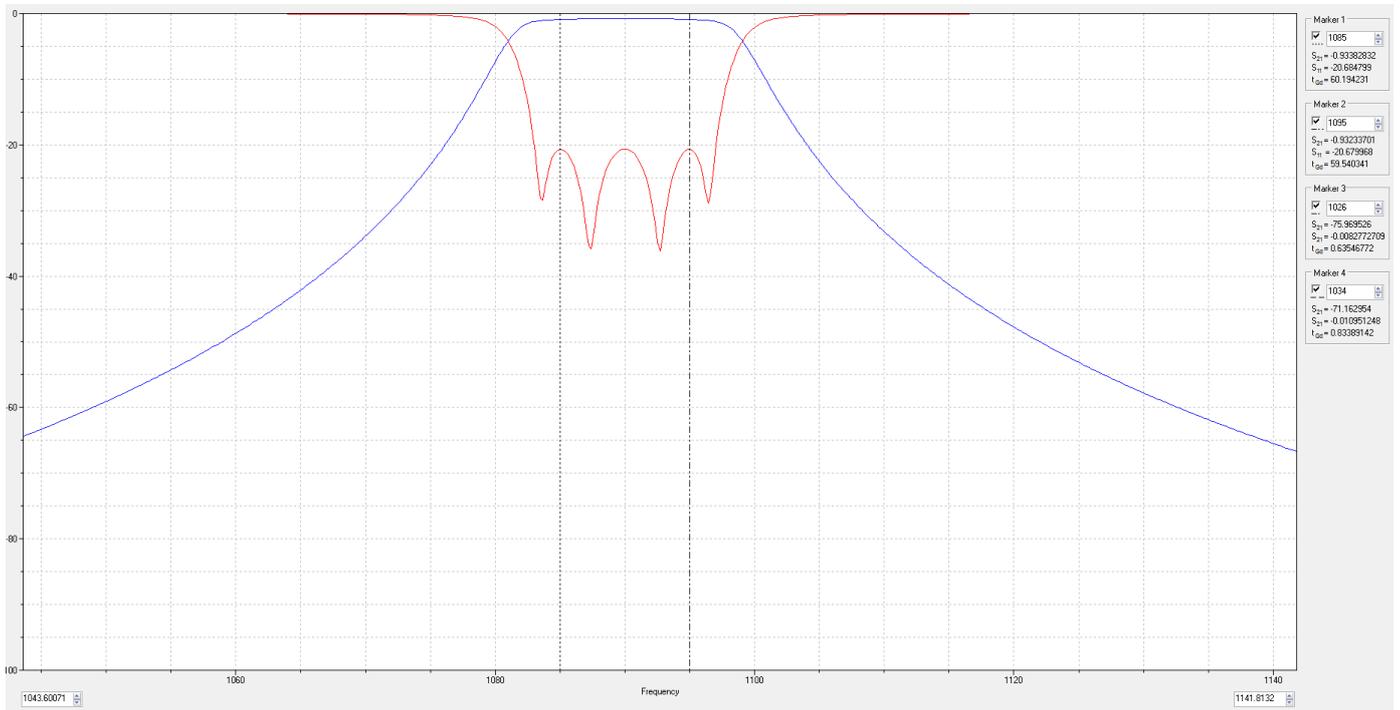
Simulation Data



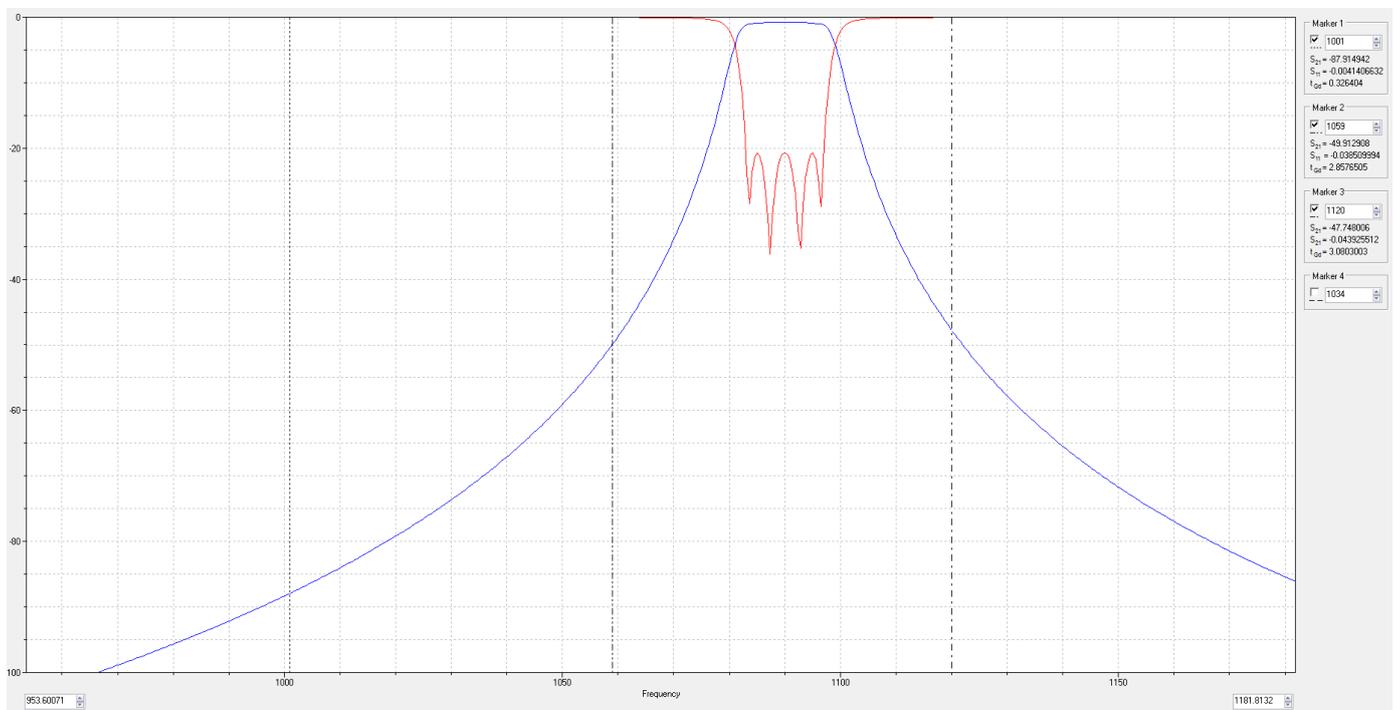
[Rx Main [Insertion loss , Return loss]



[Rx Attenuation]



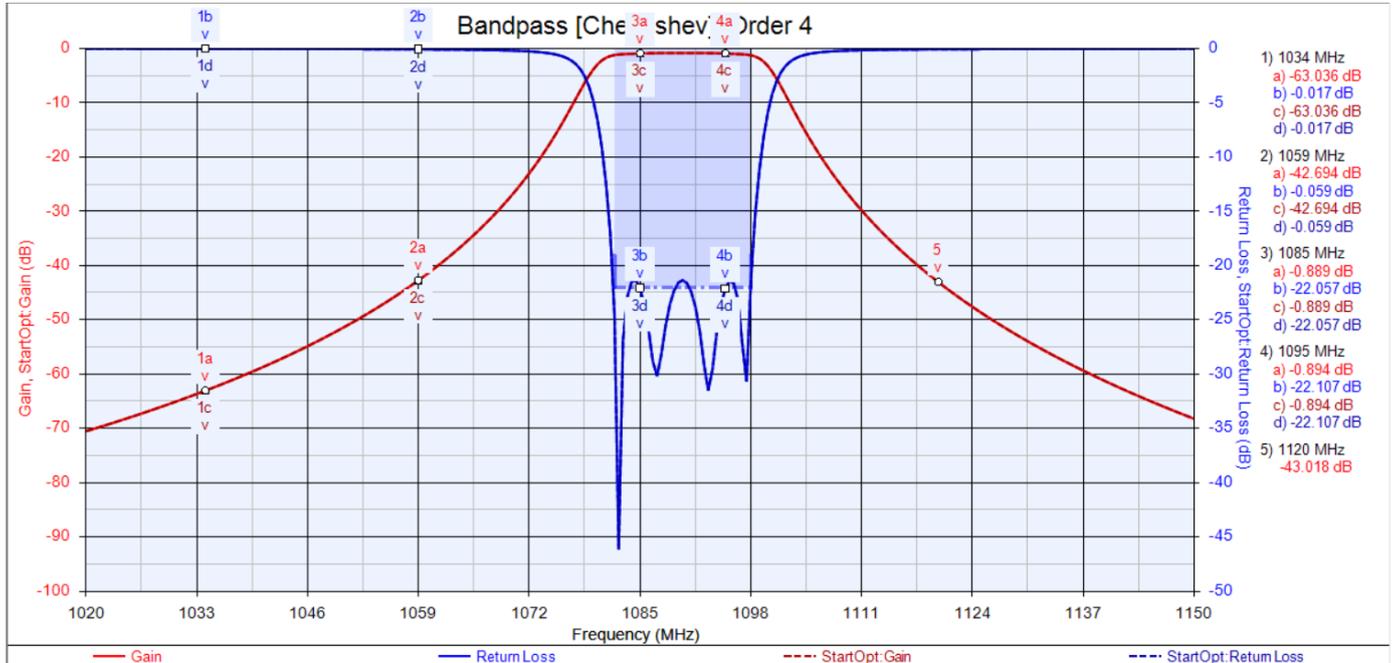
[Tx Main Insertion loss , Return loss]



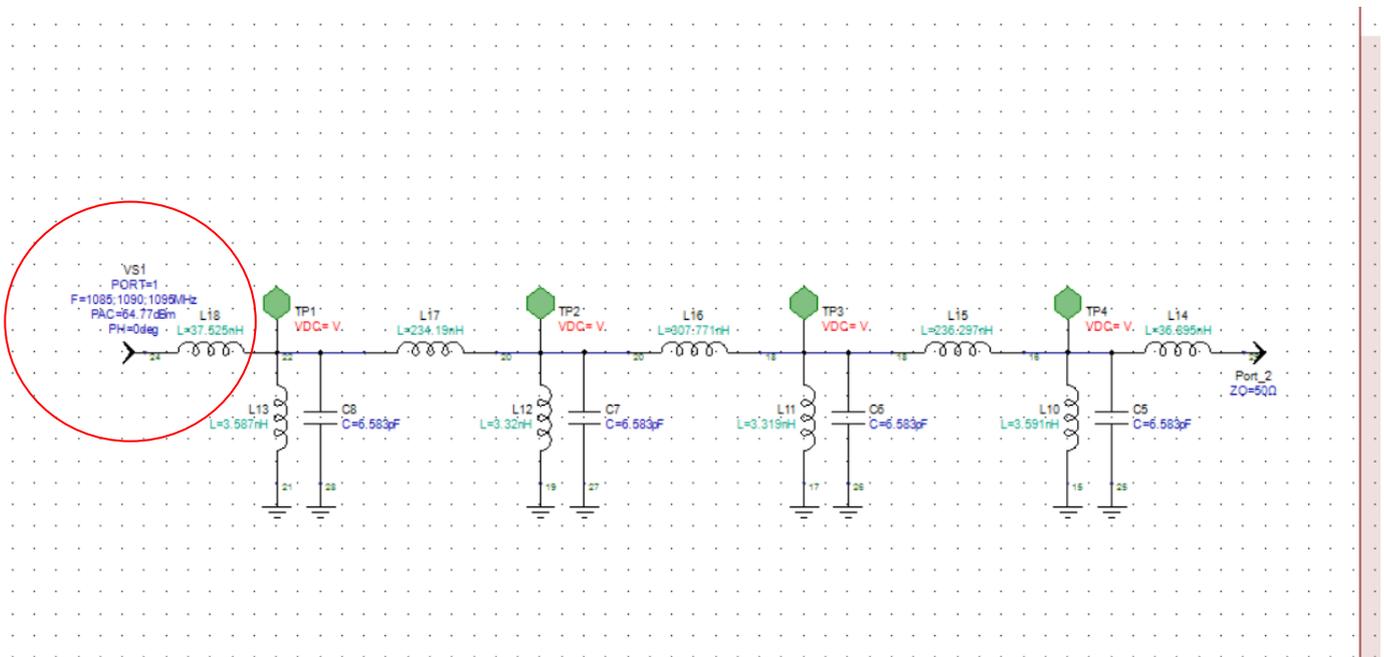
[Tx Attenuation]

Peak Power Simulation.

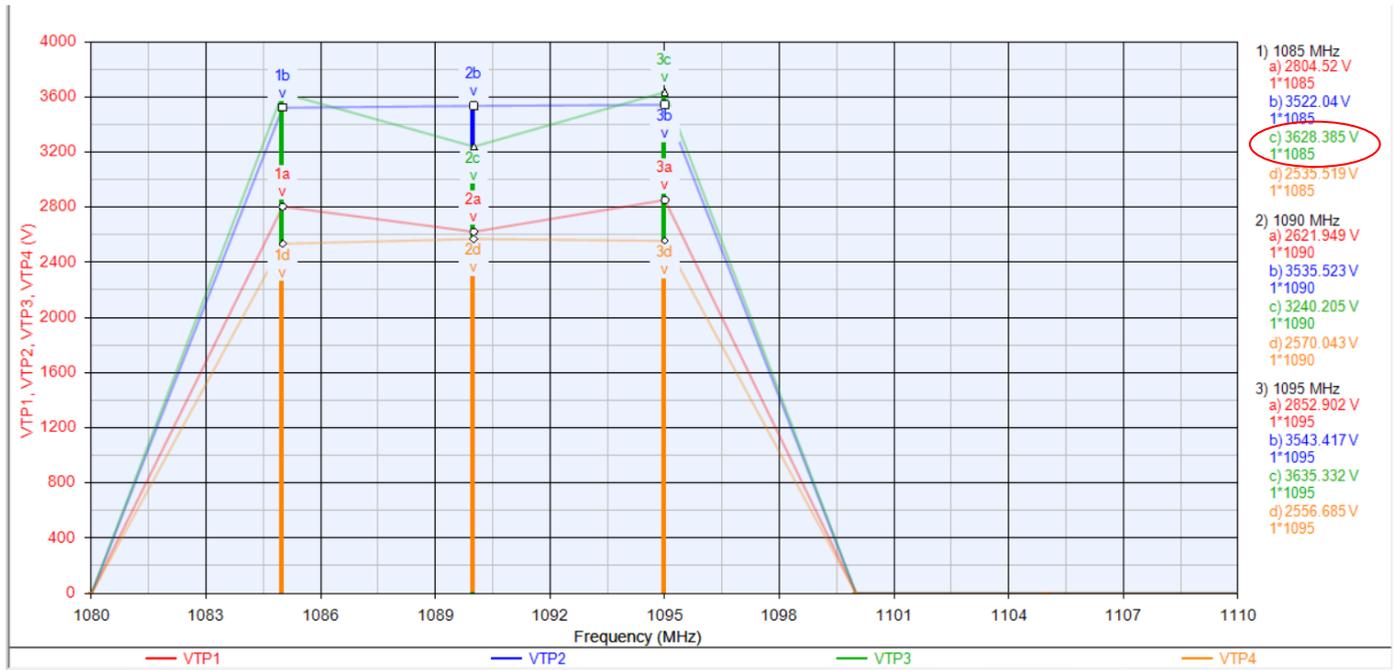
1. Test Program : genesys 2009.
2. Test condition: Power Handling: 3KW Peak, 2% Duty Cycle, 32 microseconds pulse
3. Test frequency : 1085MHz , 1090MHz , 1095MHz.
4. Input Voltage : 64.7dBm = 3KW



Tx Curve.



Schematic.



Voltage Curve

⑤ Power simulation & Paschen's Law		
Test Condition	Temp.[°C]	25.0
	Pressure[Atm]	1.00

⑤ Power simulation1 & Paschen's Law		
Find Length	Voltage at node	3,628
	Length[mm]	0.805
	Design[mm]	2.415

Paschen`s law result.

Announce : This test is not a actual data but only simulation data .

According to Paschen's law, the gap between the cover and the resonator should be more than 2.5mm in actual design.

So we will do designing based on the results of the simulation.

See below

