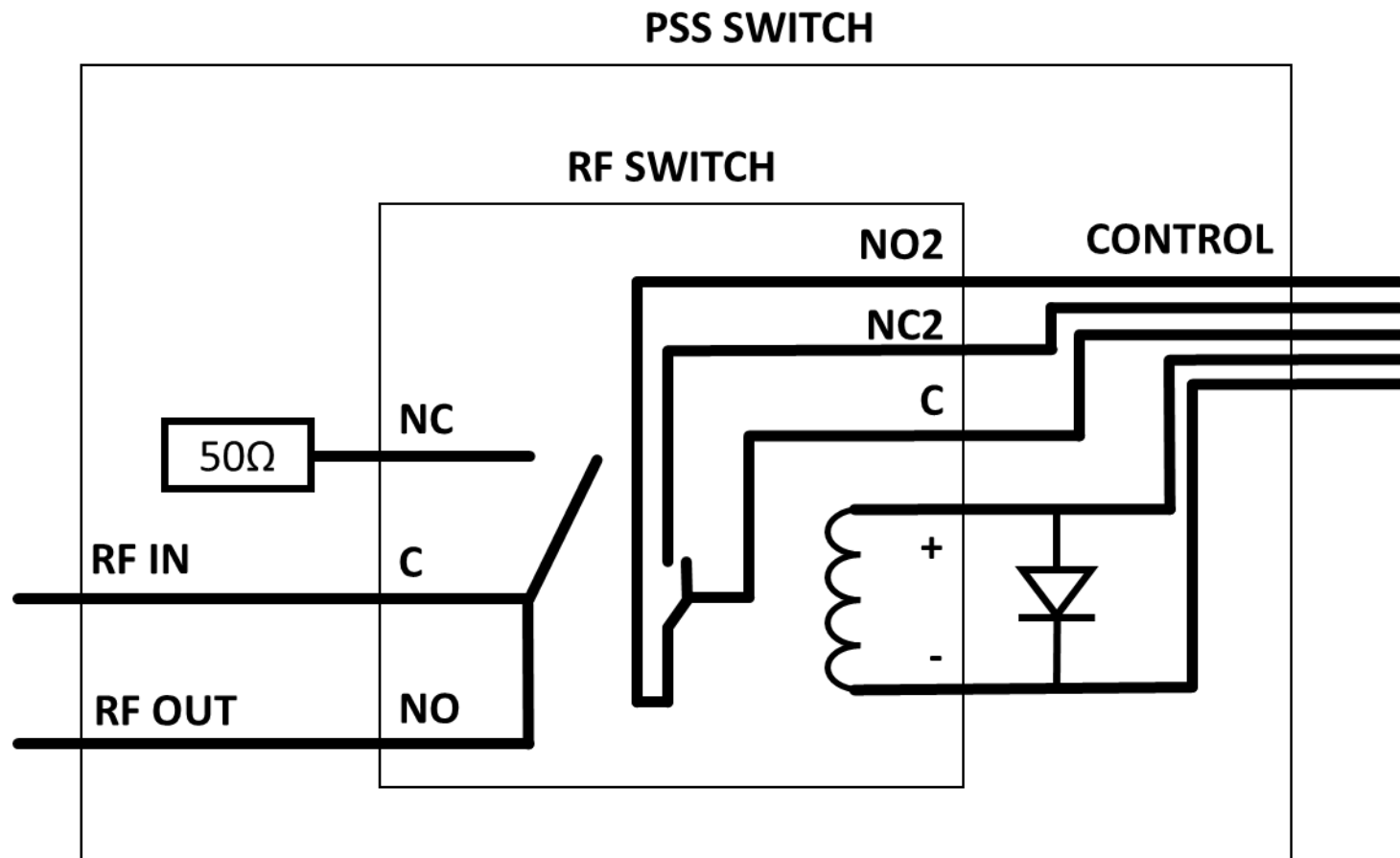


PSS Switch CDR

Maciej Grzegorzówka
Institute of Electronic Systems
25.04.2018, Lund

Block Diagram



Main requirements

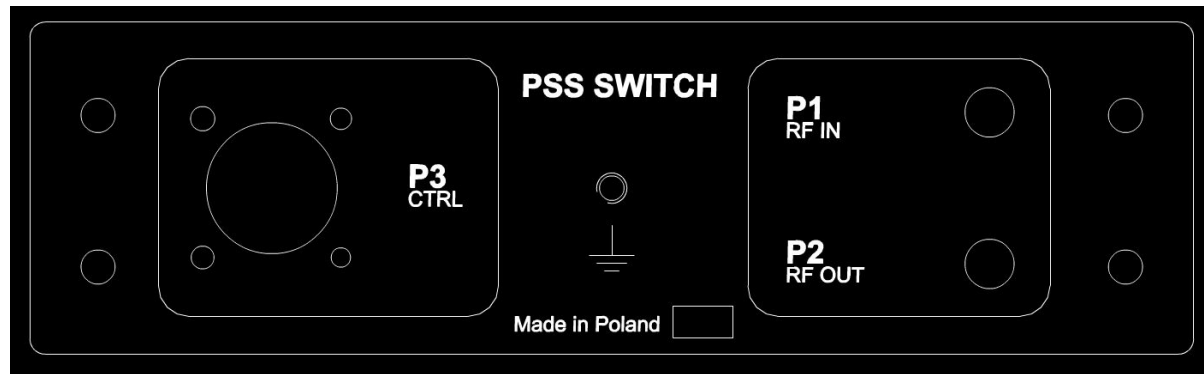
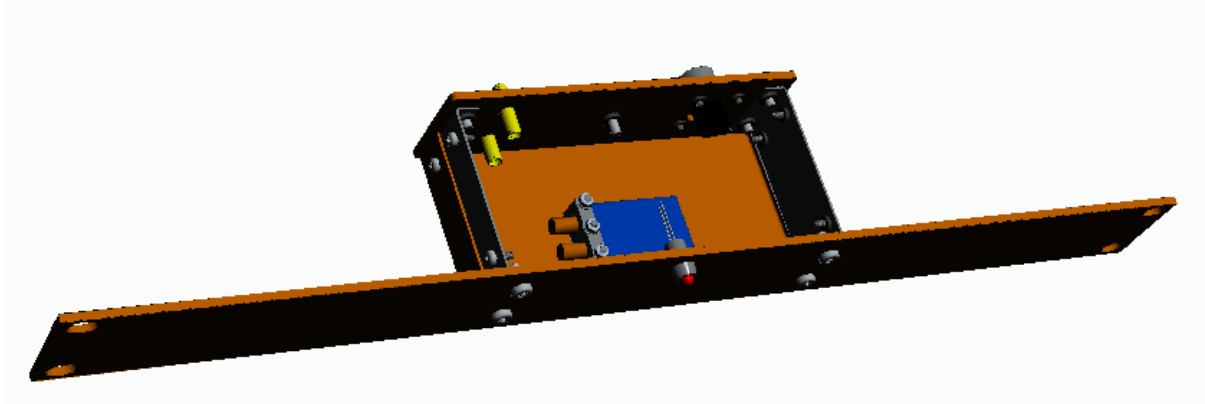
	Min	Typ	Max	
Frequency		352/704		MHz
switching time			100	ms
Insertion Loss			0.8	dB
Isolation	40			dB
VSWR in			1.2	
VSWR out			1.2	
Input power		0	20	dBm
Control Signal Voltage Level		24 +/- 10 %		V
Control Signal Current		100	200	mA

Main components

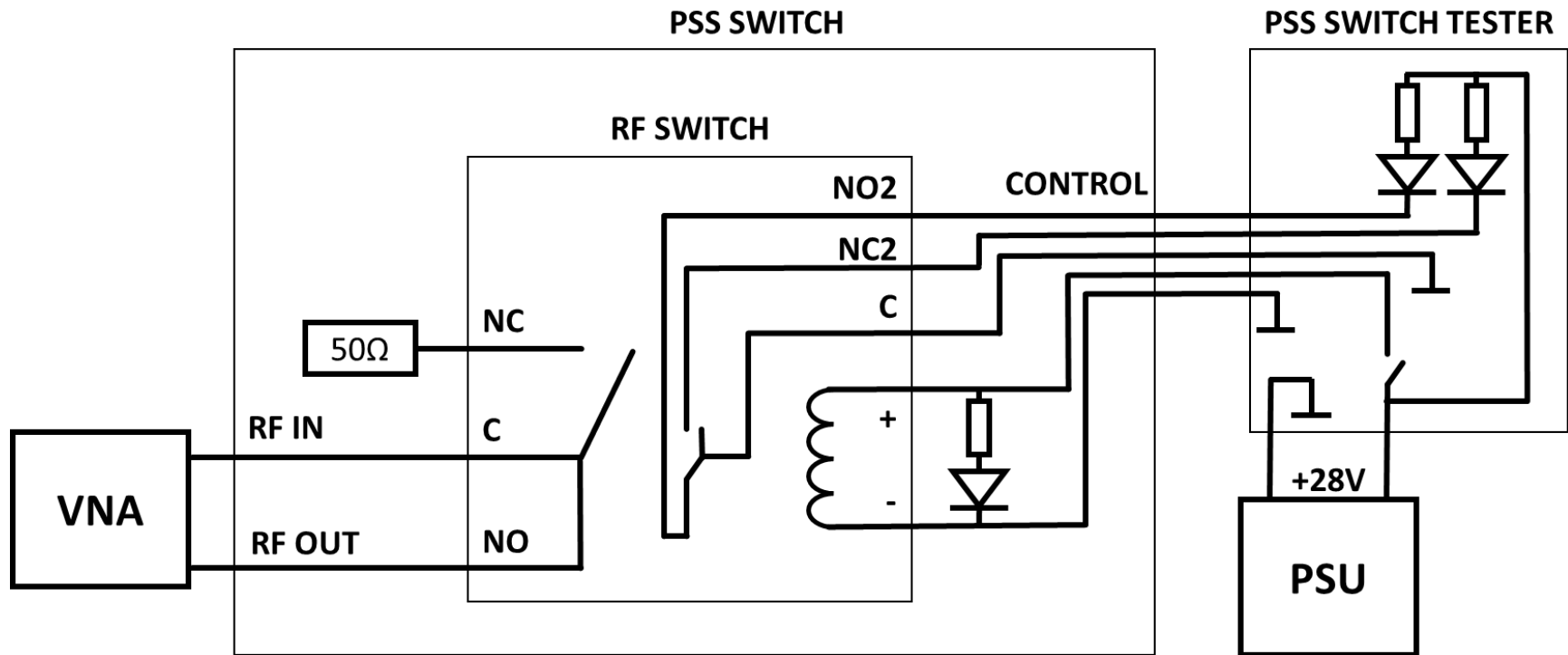
- RF Switch:
 - Radiall R570323000
- Connector
 - Amphenol RT0W0106SNH-K



Mechanical design



Testing



- PSS Switch current consumption in ON state
- Scattering matrix at 352 MHz and 704 MHz in both switch states
- The LED activity in both states
- The NC and NO confirmation signals in both states

Status and Schedule

- The RF Switches were ordered and received
- First prototype have been manufactured – not yet tested

Activity	End Date	Comment
Prototype measurements	11.05.2018	
Delivery of first batch	31.07.2018	
Delivery of second batch	28.02.2021	The second batch will be manufactured just after first batch and will be stored at PEG premises

Summary

- The main aspects of the design were presented.
- The first prototype was manufactured.
- RF Switches were ordered and delivered.
- We are ready to start mass production.

Thank you