



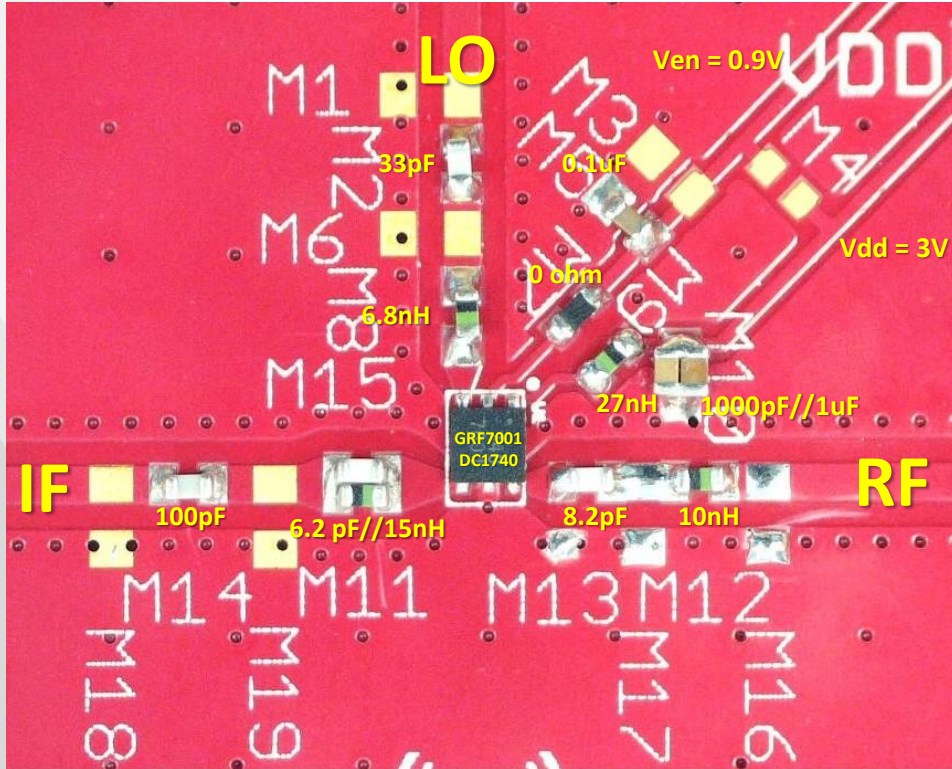
## GRF7001 Down-Conversion

RF : 470 - 570 MHz

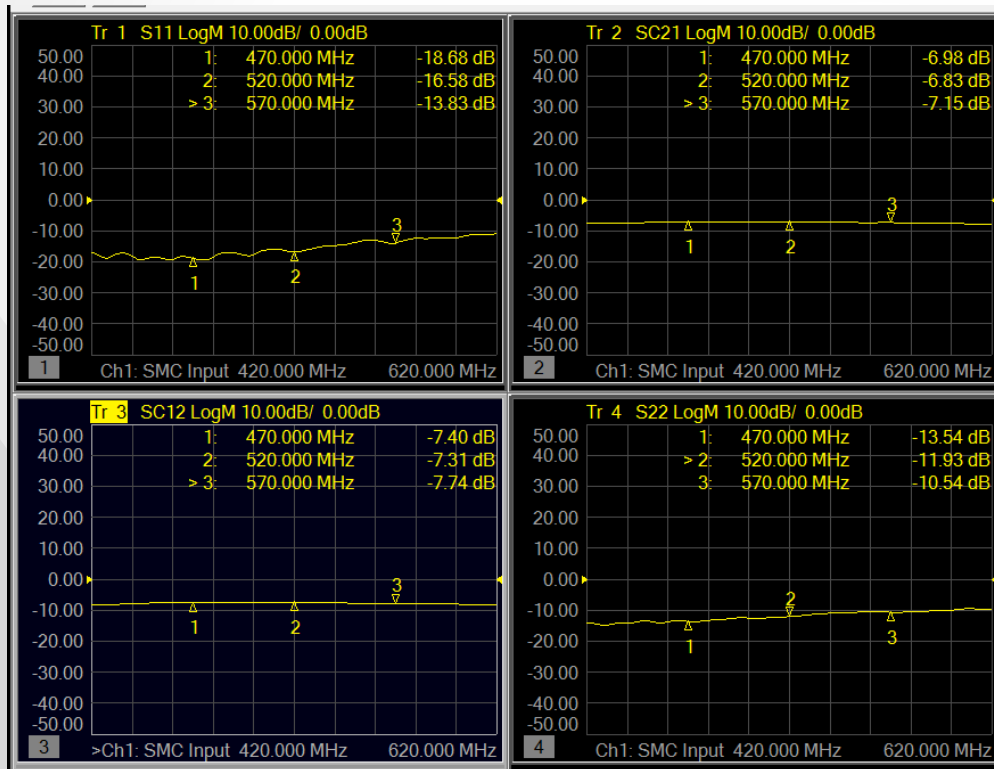
LO : 713.95 -813.95 MHz

IF : 243.95 MHz

# GRF7001 Schematic:



# GRF7001 Response:



Port 1 : RF (input)

Port 2 : IF (output)

## Test Condition

$V_{dd} = 3\text{ V}$ ,  $V_{en} = 0.9\text{ V}$

$P_{RF} = -15\text{ dBm}$

$P_{LO} = 0\text{ dBm}$

$f_{RF} = 470 - 570\text{ MHz}$

$f_{LO} = 713.95 - 813.95\text{ MHz}$

$f_{IF} = 243.95\text{ MHz}$

# GRF7001 Data

Description	RF Frequency (MHz)	LO Frequency (MHz)	IF Frequency (MHz)	Vdd (V)	Ven (V)	Idd (mA)	Ien (mA)	Conversion Loss (dB)	IP1dB (dBm)	IIP3_Pin (dBm)	IIP3 (dBm)	LO leakage at RF/IF at 0dBm LO (dBm)	LO RL (dB)
GRF7001#176	470	713.95	243.95	3.0	0.9	8.4	0.1	-6.88	> 17	-3.00	28.90	-11.71	-13.50
GRF7001#176	520	763.95	243.95	3.0	0.9	8.1	0.1	-6.86	> 17	-3.00	28.08	-12.35	-13.90
GRF7001#176	570	813.95	243.95	3.0	0.9	8.8	0.1	-7.30	> 17	-3.00	28.24	-13.16	-12.40

\* Two tone spacing is 4MHz



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