



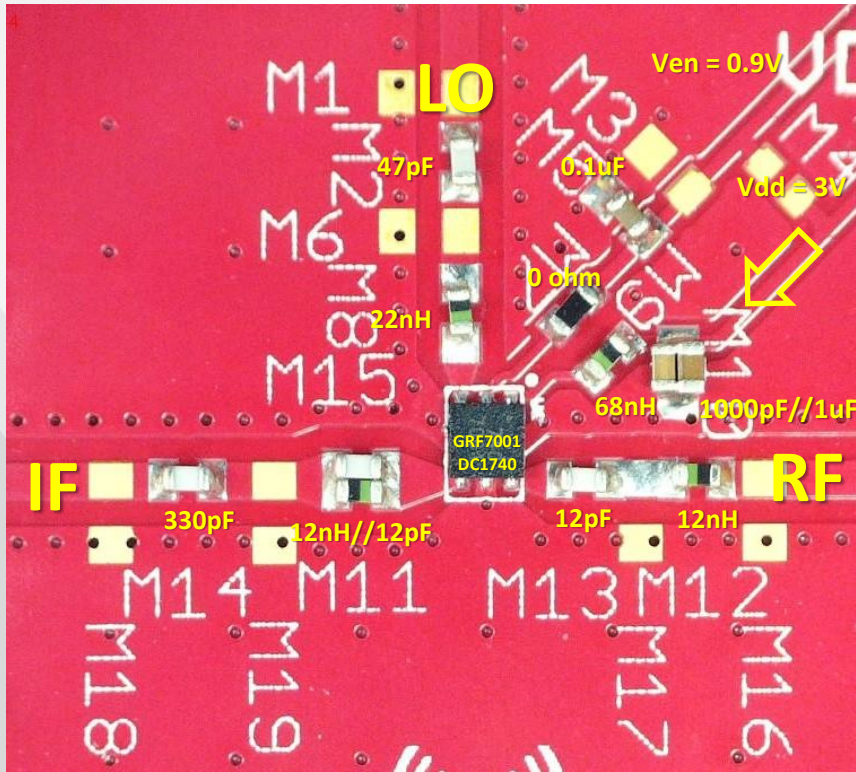
GRF7001 Down-Conversion

RF : 445 - 455 MHz

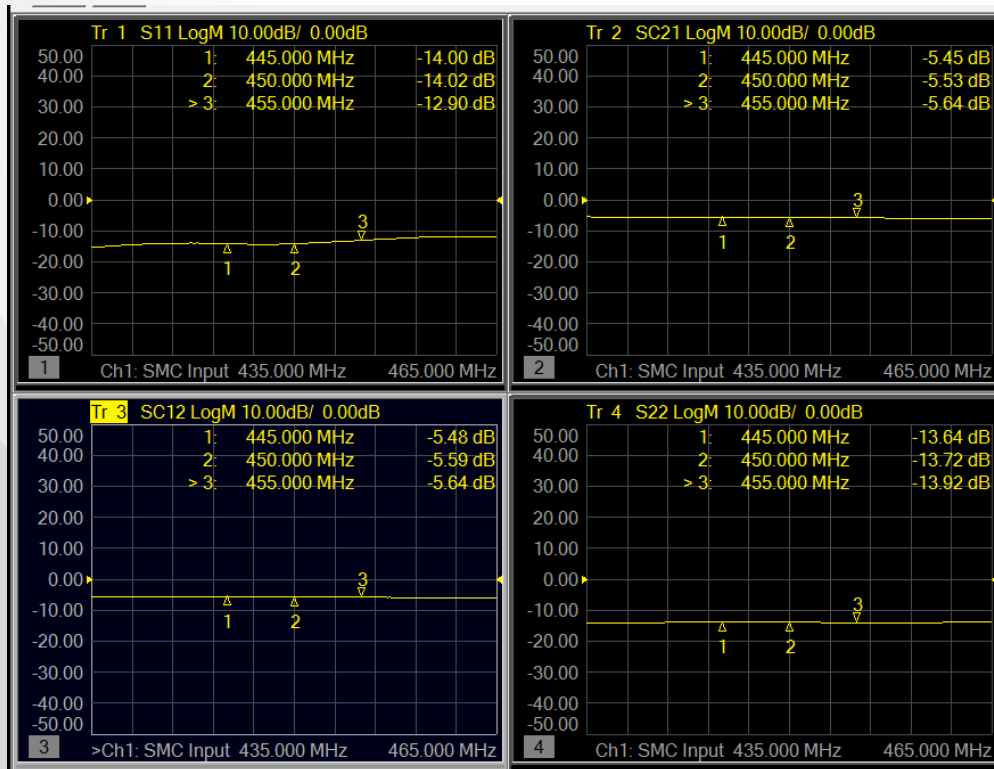
LO : 400 - 410 MHz

IF : 45 MHz

GRF7001 Schematic:



GRF7001 Response: Fixed IF



Port 1 : RF (input)

Port 2 : IF (output)

Test Condition

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

$P_{RF} = -15 dBm$

$P_{LO} = 0 dBm$

$f_{RF} = 445 - 455 MHz$

$f_{LO} = 400 - 410 MHz$

$f_{IF} = 45 MHz$

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#174	445	400	45	3.0	0.9	7.7	0.1	-5.63	> 17	-3.00	27.99	-14.62	-12.20
GRF7001#174	450	405	45	3.0	0.9	7.7	0.1	-5.69	> 17	-3.00	29.57	-14.59	-12.20
GRF7001#174	455	410	45	3.0	0.9	7.6	0.1	-5.72	> 17	-3.00	28.99	-14.56	-11.80

* Two tone spacing is 4MHz



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