

Tuning properties of some commercial VCXOs

Frequency offset in Hz from nominal frequency,
measured with Stanford SR620 time interval counter.

Vtune	10MHz MTI260	5MHz MTI	10 MHz Morion	5 MHz MTI #2
-10	36,27	6,75		6,786
-9	34,8	6,47		6,358
-8	33,21	6,043		5,91
-7	31,4	5,616		5,46
-6	29,46	5,113		4,998
-5	27,377	4,63		4,47
-4	25,14	4,11		3,976
-3	22,51	3,575		3,45
-2	19,83	2,98		2,852
-1	17,02	2,334		2,262
0	13,984	1,666	-4,394	1,65
1	10,5875	0,976	-2,874	1,019
2	6,8221	0,2515	-1,382	0,3677
3	2,401	-0,483	0,023	-0,284
4	-2,472	-1,248	1,463	-0,962
5	-7,985	-2,036	2,875	-1,624
6	-13,57	-2,792	4,36	-2,292
7	-18	-3,549	5,74	-2,976
8	-19,3	-4,282		-3,665
9	-20,522	-4,94		-4,424
10	-21,3	-5,688		-5,164

B = MTI260-0502-B PN = 010395-0502
10MHz REFOUT = 6.04V 2Vpp sine into 50 Ohms SN 40294

C = MTI260-0624-C PN = 010395-0624
5MHz REFOUT = 6.17V 2Vpp sine into 50 Ohms SN 100055
Label „Z3811-80010“

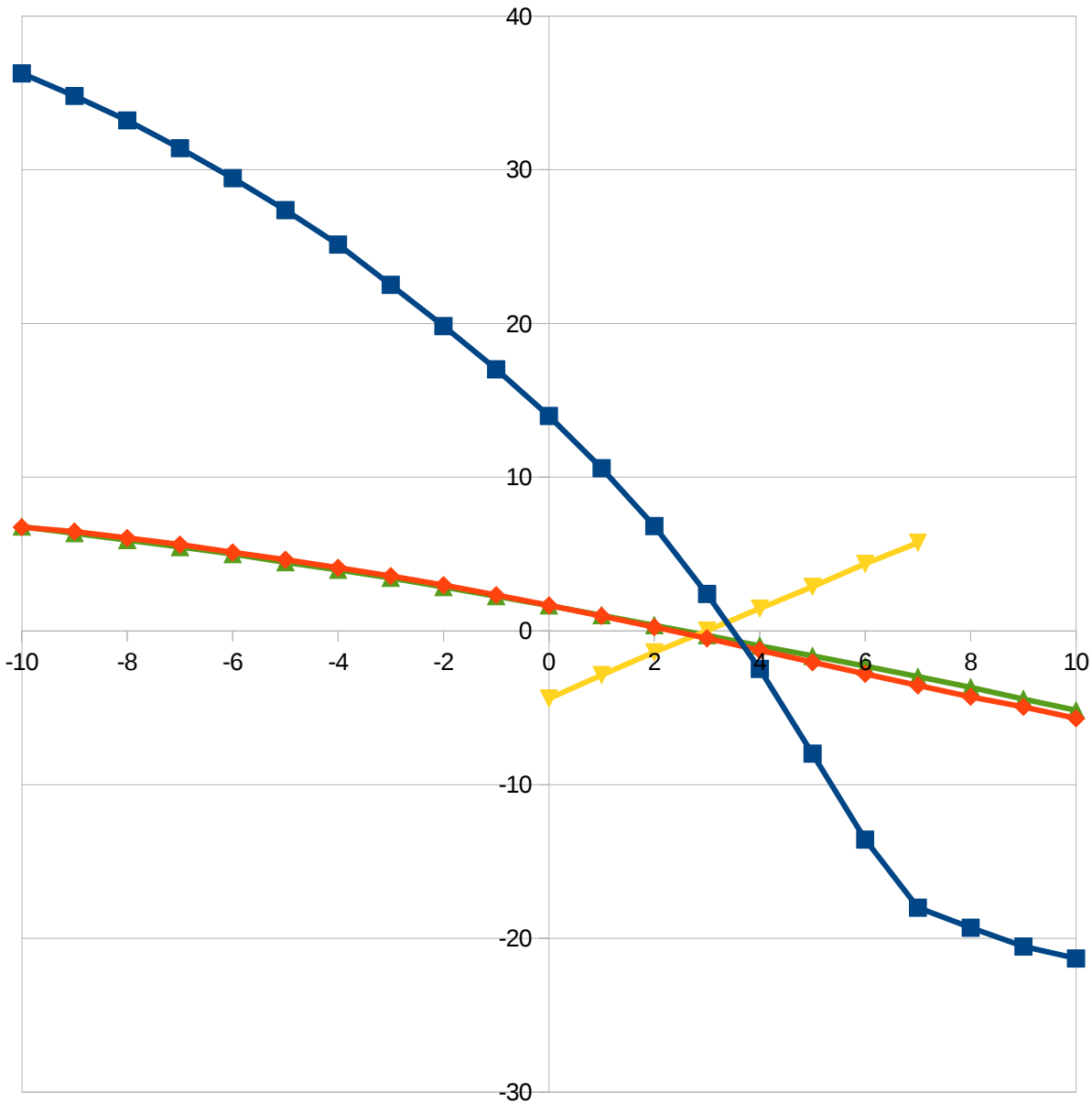
D = Morion MV89A PN = XO00281M
Rev 3 30062000010 Refout = 5V SN = ZC6944 Date = 07/22
Label = ROHS5
Note that the official tuning range extends only up to 5V.

E = MTI260-0624-B PN = 010395-0624
5 MHz Refout =6.155V SN=88262

Another MV89A ceased to oscillate for Vtune > 500 mV (defective).

Frequency offset vs. Vtune:

blue 10 MHz MTI260,
red/green 5 MHz MTI260,
yellow 10 MHz Morion MV89A



It seems to be a safe assumption that GND and the reference output voltage are the natural limits of the tuning voltage.