



ZVEZA RADIOAMATERJEV SLOVENIJE

LEPI POT 6, SI-1000 LJUBLJANA

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BRANKO ZEMLJAK - S57C

ZRS VHF MANAGER

POŠTNA 7/B, SI-1360 VRHNIKA

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Ljubljana, 23.03.1998

ČETRTO "ZRS UKV SREČANJE"

Zveza radioamaterjev Slovenije Vas vabi na četrto "ZRS UKV SREČANJE", ki bo dne 11.04.1998, v Hotelu Ilirija - zimski vrt, Trg Prekomorskih brigad 4, telefon (061) 159 33 37 s pričetkom ob 13:00 uri.

Dnevni red srečanja:

13:00 Prihod udeležencev, prijava, predstavitev dejavnosti sponzorjev

13:30 Otvoritev srečanja, predstavnik ZRS

Predavanja:

1. Matjaž Vidmar, S53MV - Spektralni analizator v samogradnji,
2. Robi Vilhar, S53WW - Zmanjšanje motenj v UKV tekmovanjih

Meritve:

1. Marko Čebokli, S57UUU - Merjenje šumnega števila predojačevalnikov in transverterjev do 10 GHz

16:00 Podelitev nagrad za ZRS UKV tekmovanja:

Zveza Radioamaterjev Slovenije, ZRS

1. Alpe-Adria UHF tekmovanje 1997
2. Alpe-Adria VHF tekmovanje 1997
3. ZRS oktobrsko UHF/SHF tekmovanje 1997

Radioklub "JOŽE LADIHA" - Ljutomer, S59DTU

1. ZRS marčevsko VHF/UHF/SHF tekmovanje 1997

Radioklub "FRANJO MALGAJ" - Ravne na Koroškem, S59EHI

1. ZRS junijsko VHF/UHF/SHF tekmovanje 1997

Gorenjska Regija

1. ZRS julijsko VHF/UHF/SHF tekmovanje 1997

Radioklub "AMATER" - Sevnica, S59DHP

1. ZRS septembrsko VHF tekmovanje 1997

Radioklub "LJUBLJANA" - Ljubljana, sekcija S59CDE

1. DIPLOMA "10. let S59CDE"

Organizirane prehrane ne bo!

Priloge: - spisek nagrajencev "ZRS UKV tekmovanj"

Ps: SEJEM RABLJENE RADIOAMATERSKE OPREME

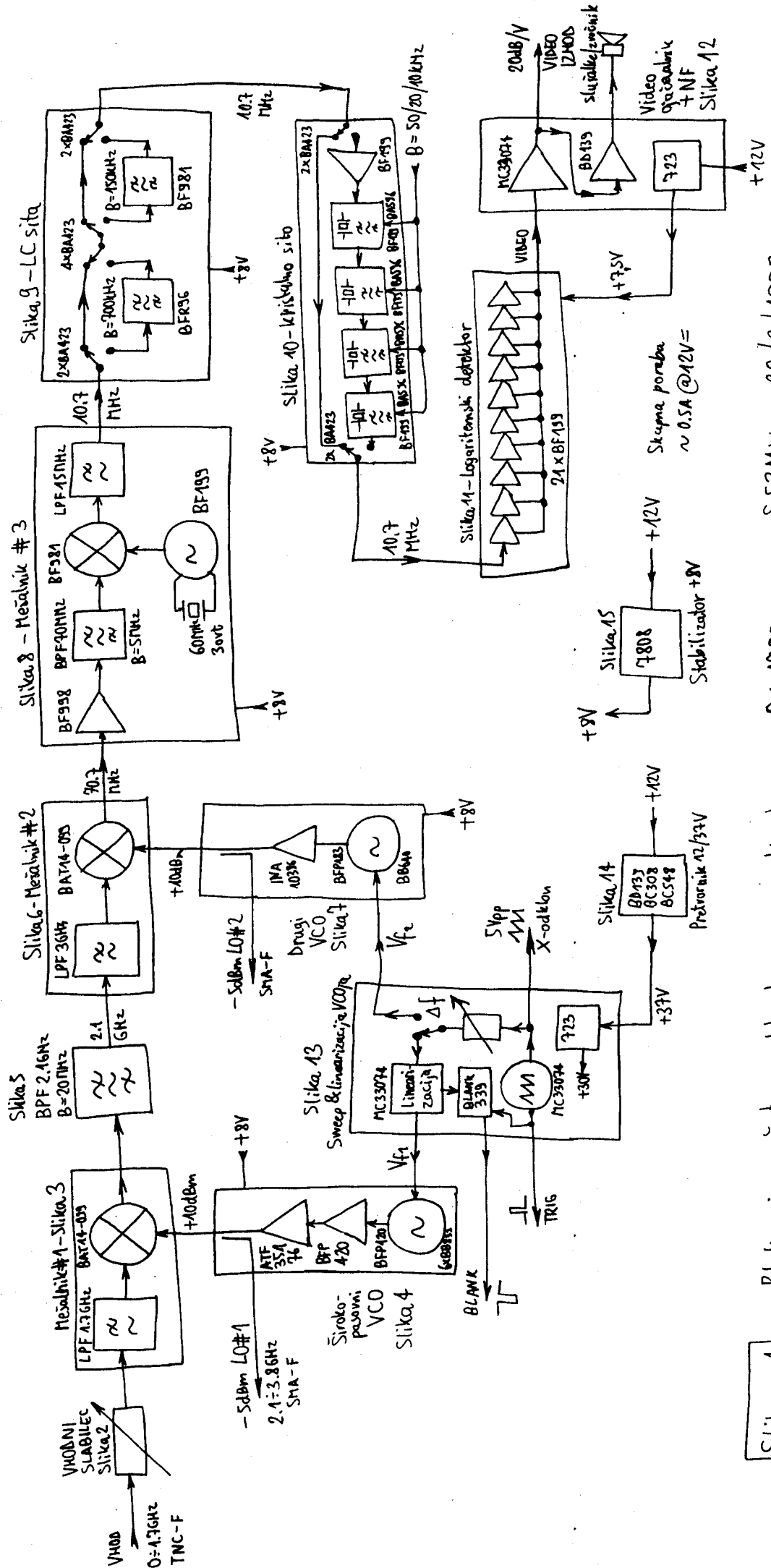
Obiščite 12. radioamaterski sejem rabljene radioamaterske opreme, ki bo v soboto 11. aprila 1998 od 08.00 do 13.00 ure v prostorih družbenega doma Stadion, Staničeva 41, Ljubljana. Nagradno žrebanje vstopnic ob 12. uri. Info/rez.: dop: (061) 37 22 48; pop/zvečer (061) 168 43 86 Leon-S59L.

Vljudno vabljeni 73!
Leon Šporič, S59L

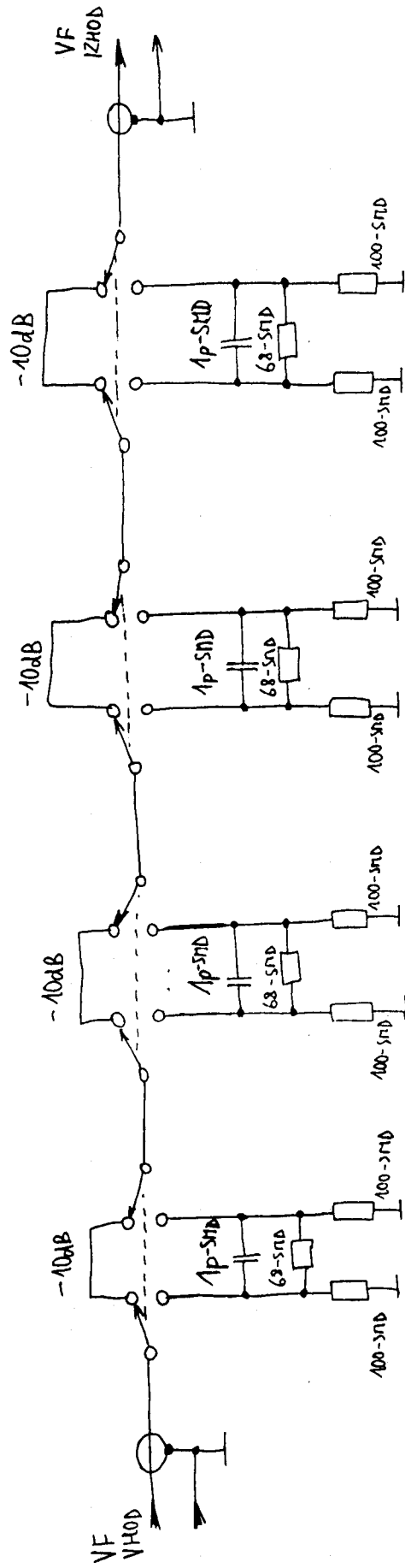
73!

ZRS VHF Manager

Branko Zemljak, S57C



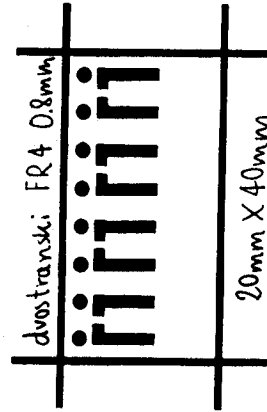
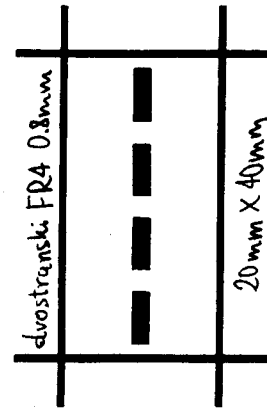
Slika 1 - Blokovi načrt spektralnega analizatorja 0 ÷ 1700 MHz. S53MV 22/3/1998



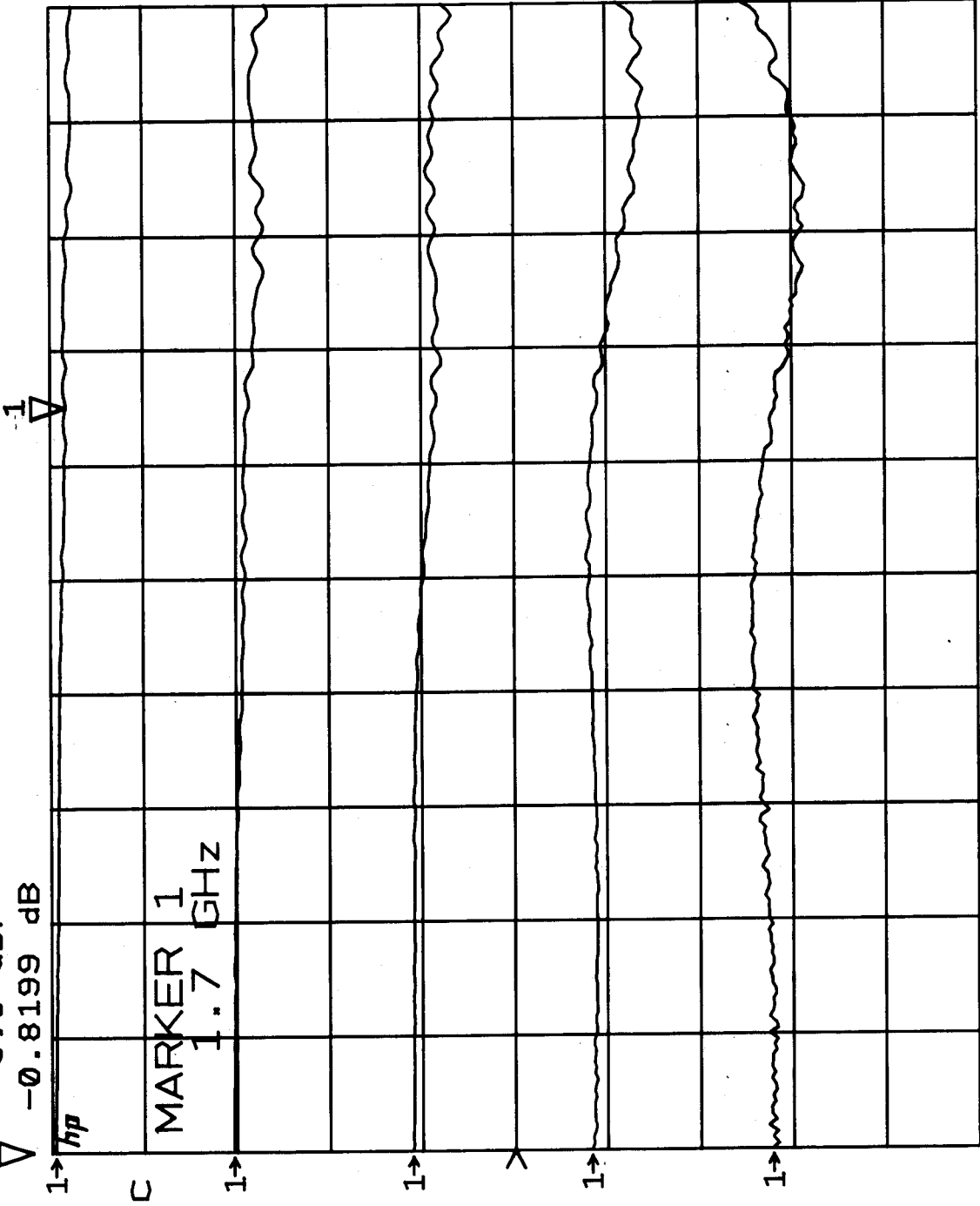
VF slabilec 0/10/20/30/40dB

SS3MV 1/2/1998

Slika 2

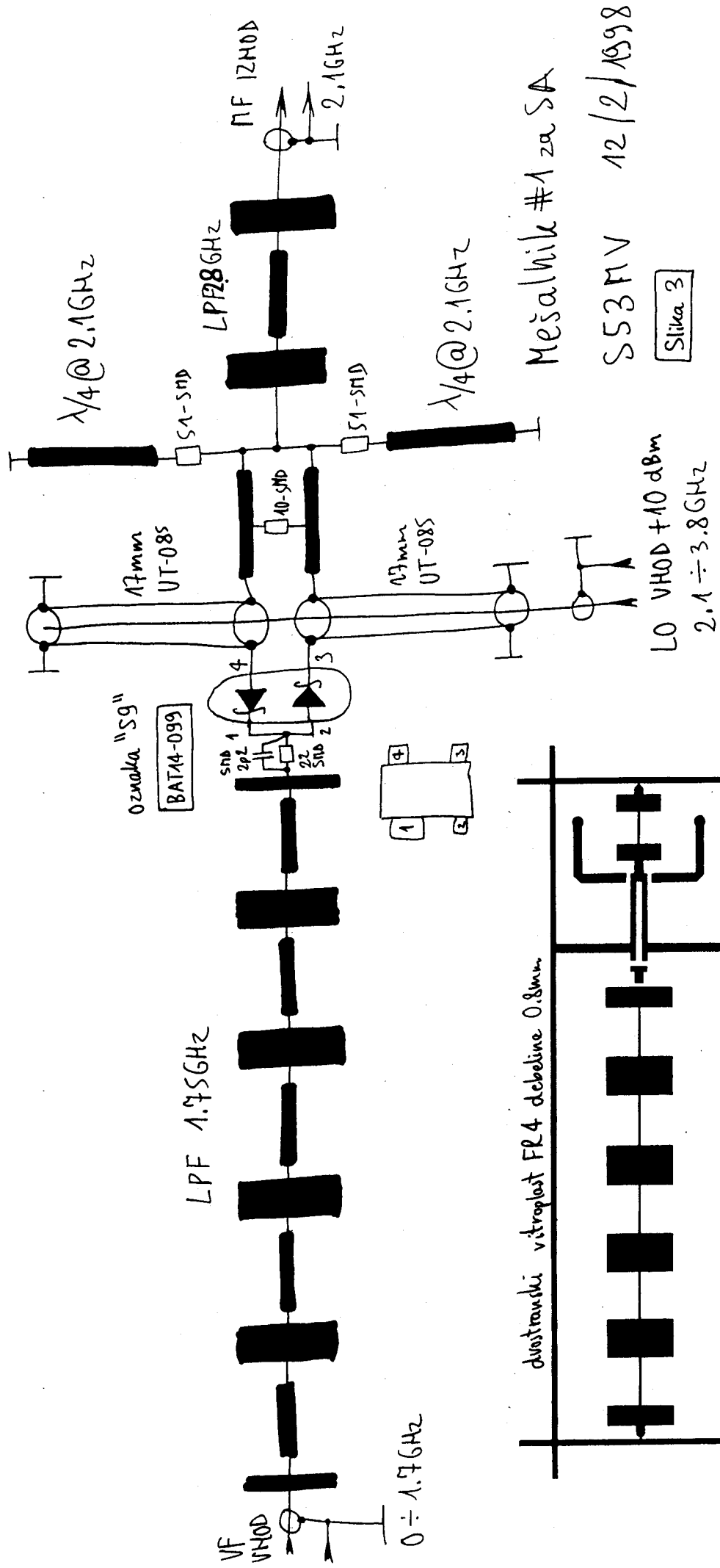


S12 log ↑ G
REF -25.0 dB
1 5.0 dB/
V -0.8199 dB

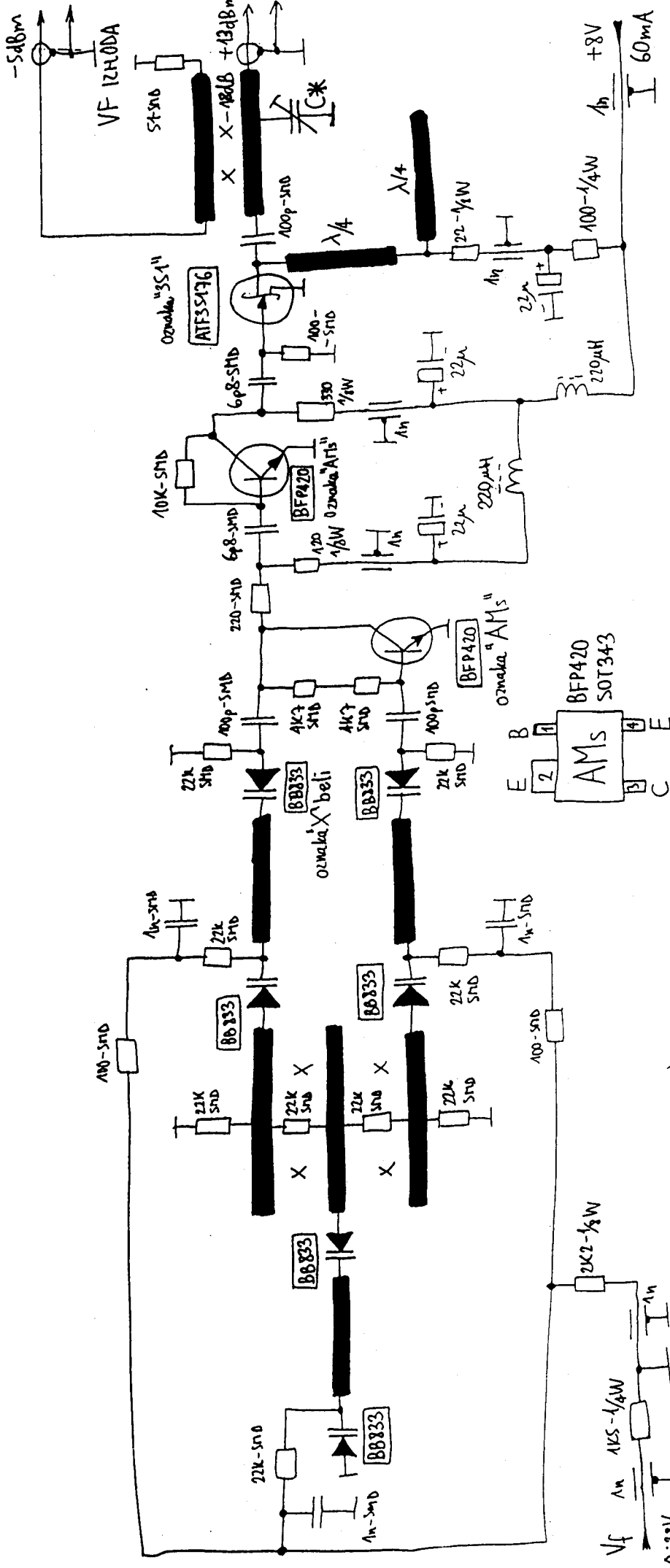


START 0.400000000 GHz
STOP 2.400000000 GHz

Kompensacija 4 x 1 pF 0805, plava stikala



dvostranski vitroplošt FR4 debeline 0.8mm

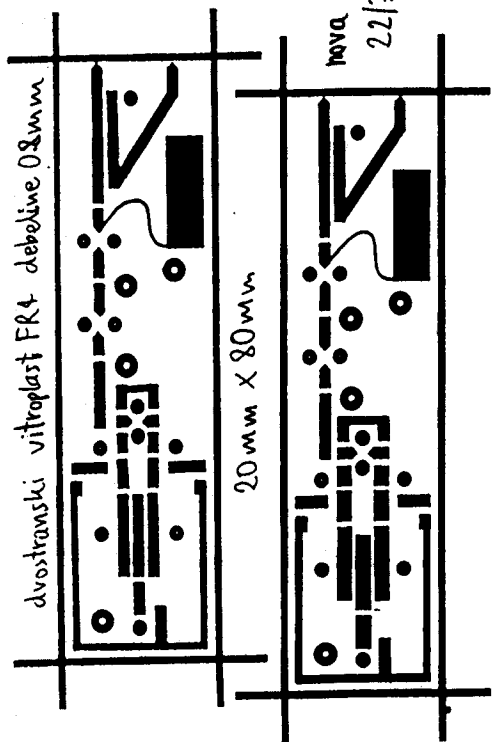


Širokopasovni VCO 2050MHz → 3850MHz

S53MV 21/1/1998

Slika 4

prebrava 6/6/1998



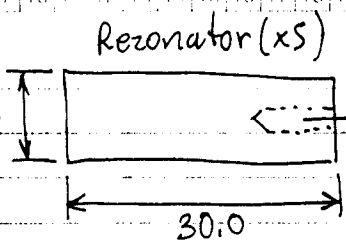
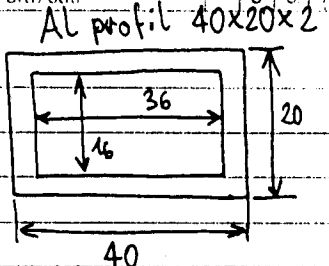
skrajšati
srednji
rezonator?

nova izvedba
22/3/1998

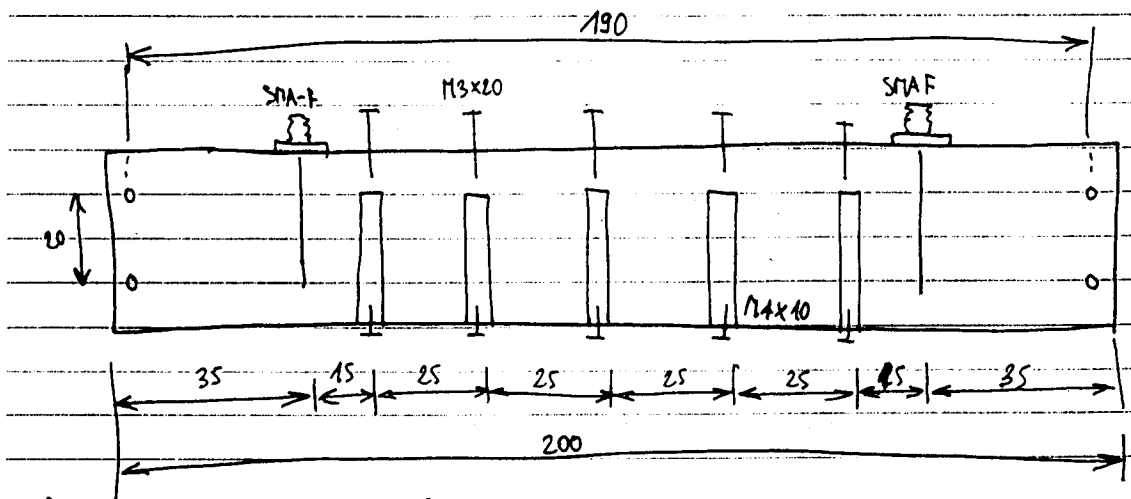
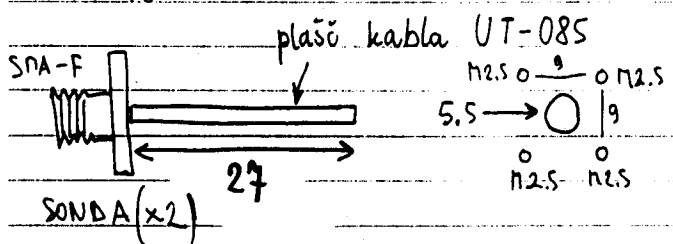
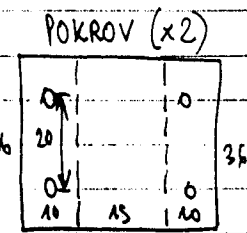
SITO GLAVNIK za 2100MHz

11/1/1998

dan/dan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	day/tag
mesec/mjesec	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	month/month																			
ura/sati	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	1	2	3	4	time/uhur							



M4 luknja dolžine 10mm

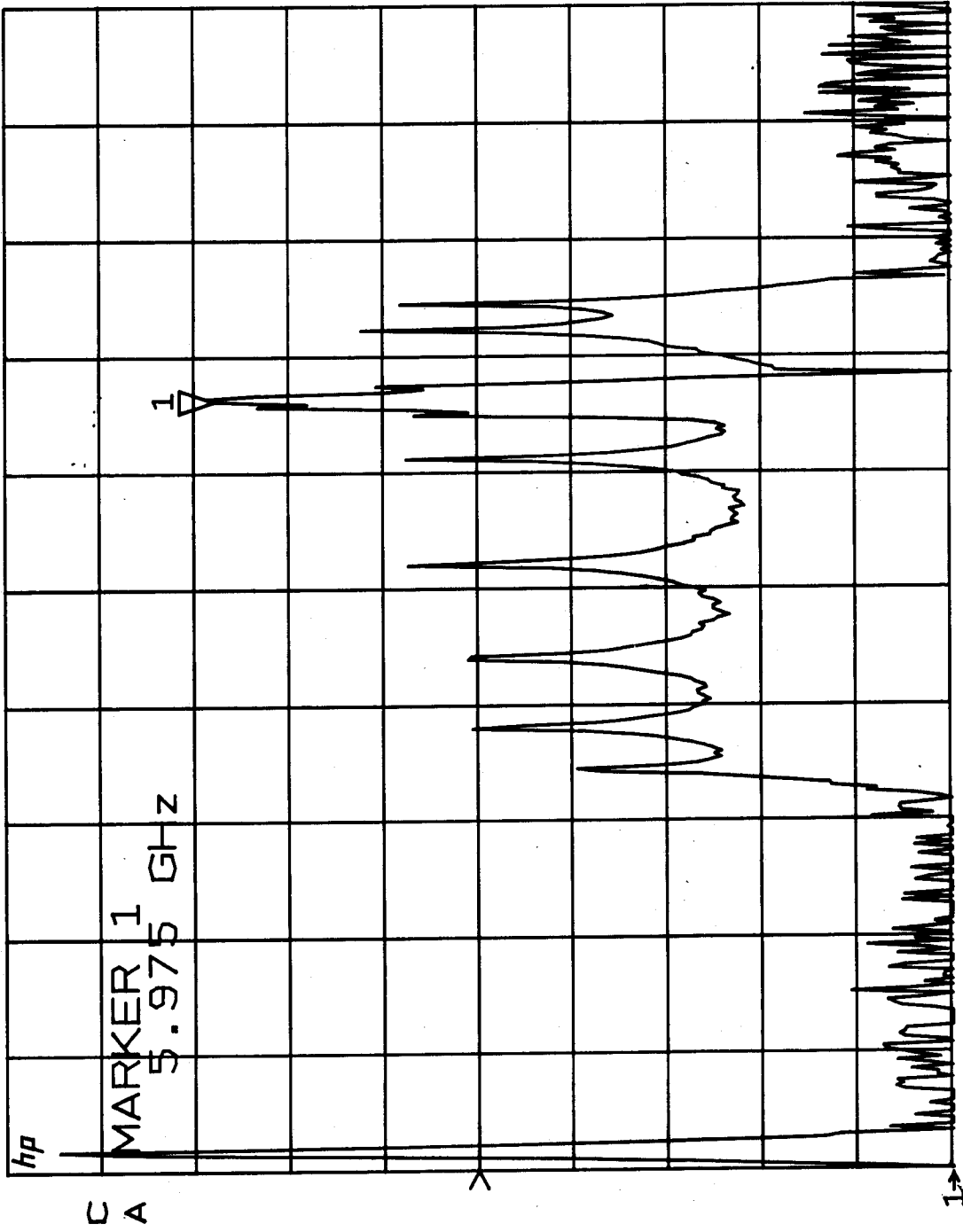


- $f_0 = 2100 \text{ MHz}$ $a @ f_0 \sim -2 \text{ dB}$
- B - 3dB $\sim 22 \text{ MHz}$
- B - 10dB $\sim 26 \text{ MHz}$
- B - 20dB $\sim 30 \text{ MHz}$
- B - 30dB $\sim 38 \text{ MHz}$
- B - 40dB $\sim 45 \text{ MHz}$
- B - 50dB $\sim 56 \text{ MHz}$
- B - 60dB $\sim 70 \text{ MHz}$
- B - 70dB $\sim 85 \text{ MHz}$
- B - 80dB $\sim 110 \text{ MHz}$
- B - 90dB $\sim 130 \text{ MHz}$

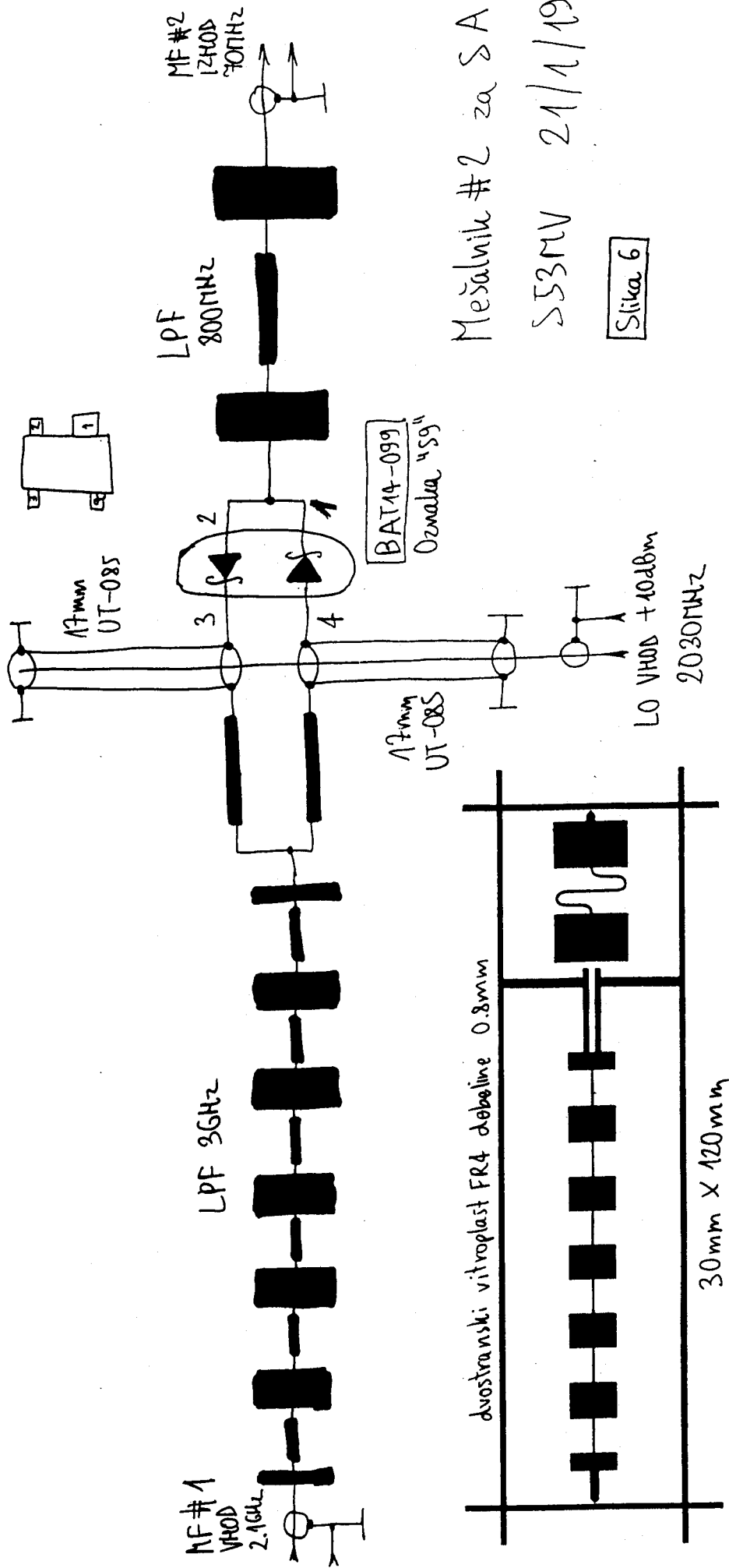
Slika 5

S12 og MAG
REF -50.0 dB
1 10.0 dB/
▽ -22.267 dB

glavnike za 2.16GHz

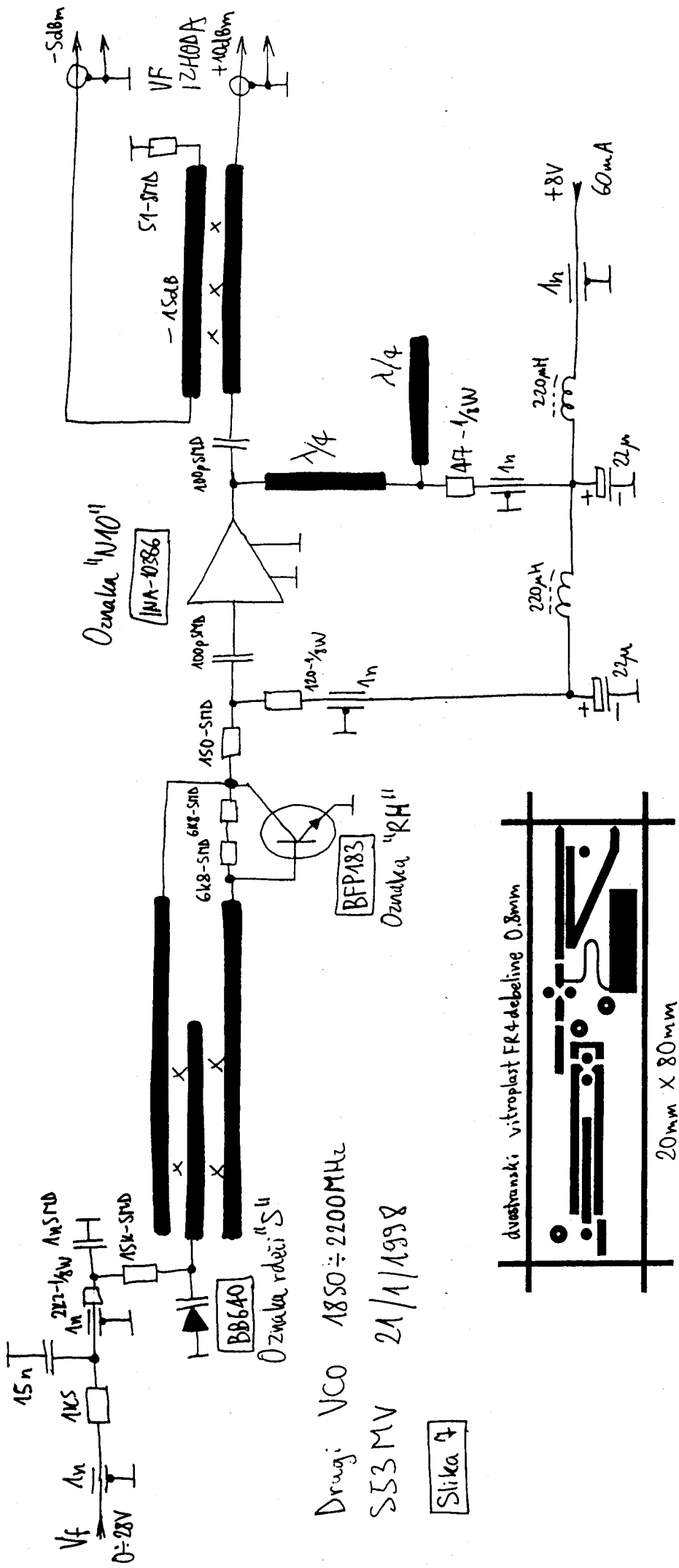


START 2.00000000 GHz
STOP 8.00000000 GHz



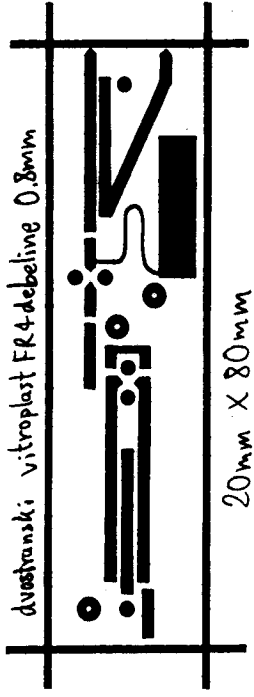
Mešalnik #2 za SA
 S53MV 21/1/1998

Slika 6



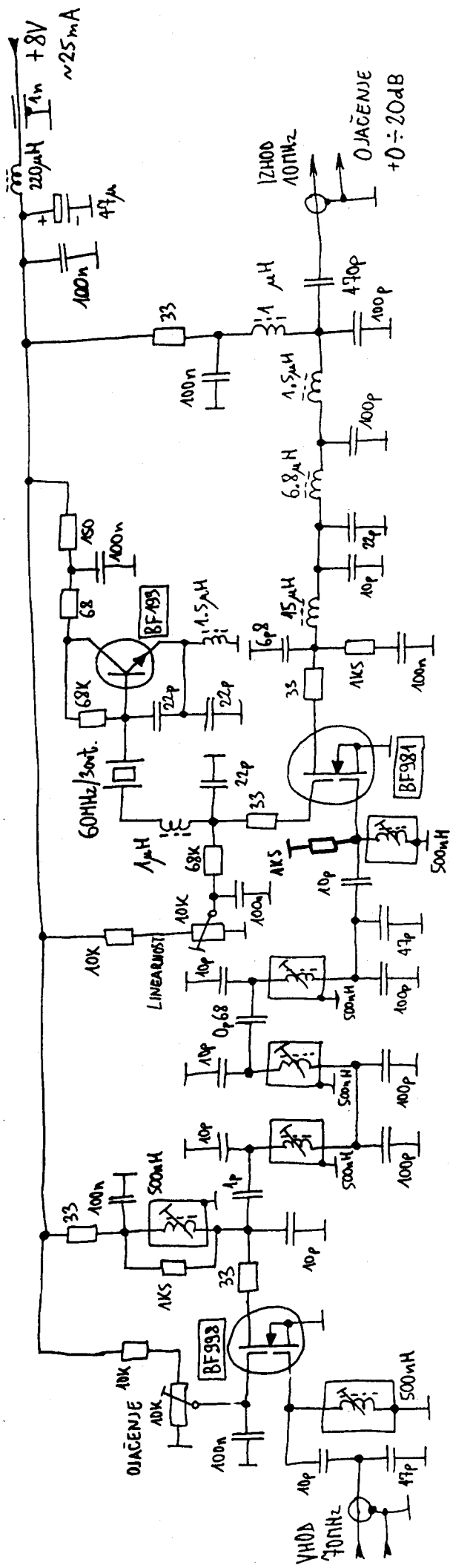
Drugi VCO 1850 ÷ 2200MHz
 S53MV 21/1/1998

Slika 7



dvostraniski vitroplast FR4-debeline 0,8mm

20mm X 80mm

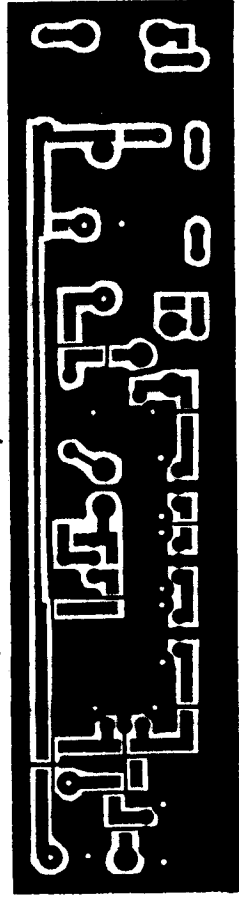


Mesalnik #3 za SA

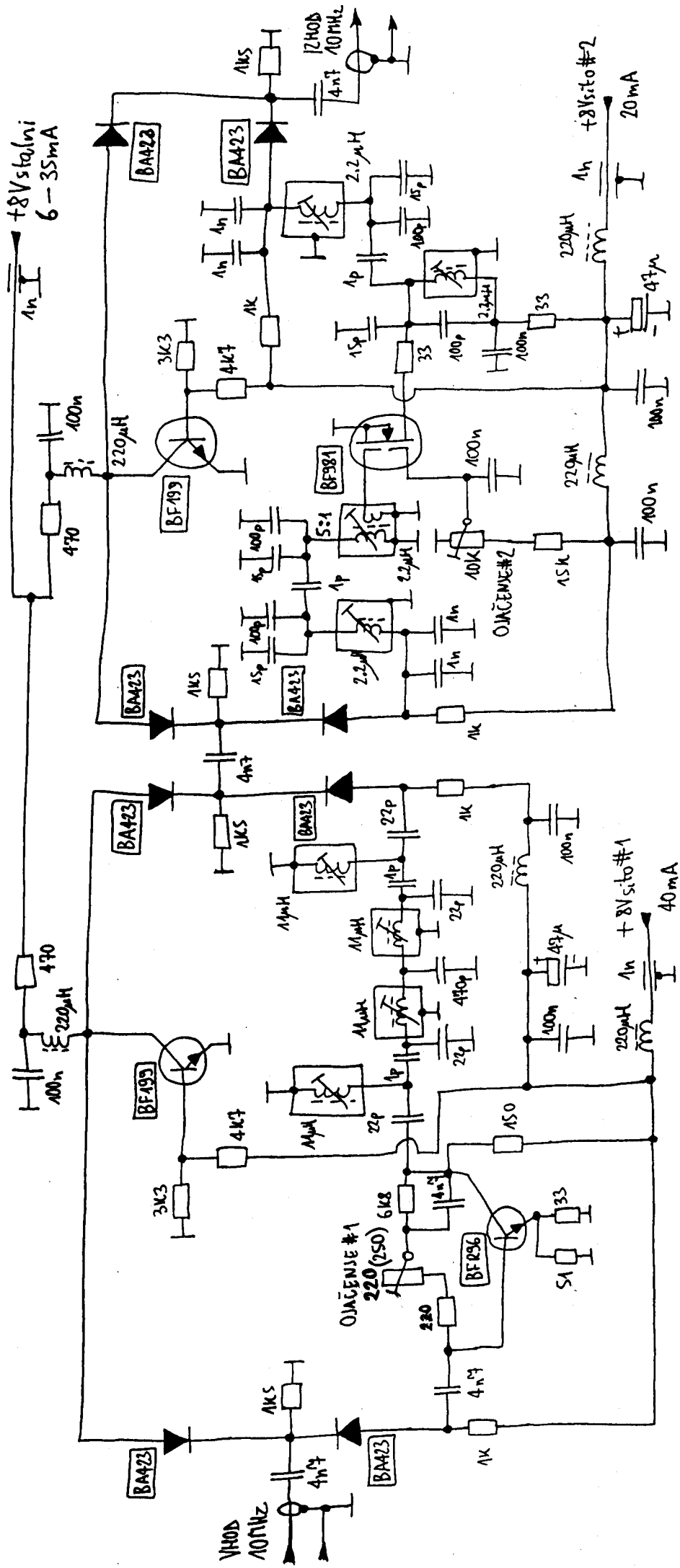
SS3 MV 24/1/1998

Slika 8

Enostranski vitroplast FR4 debljine 0.8mm



30mm X 120mm

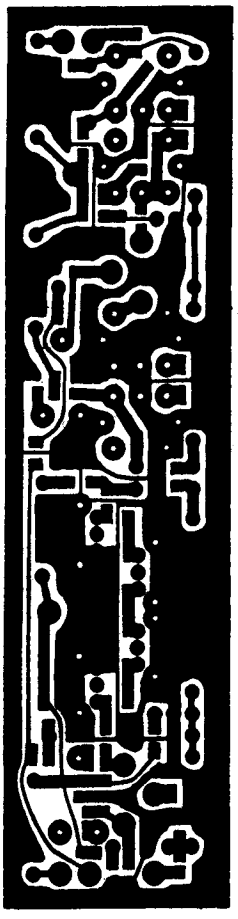


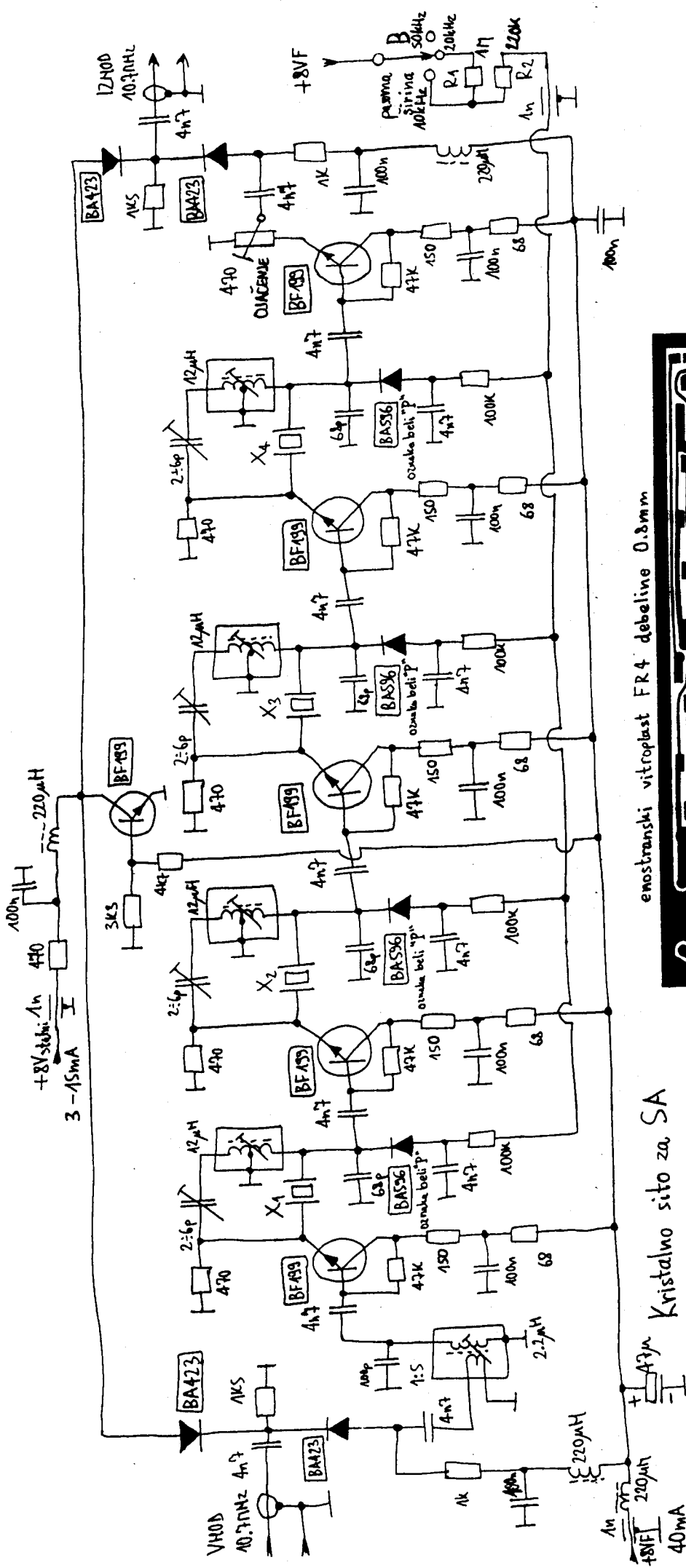
enostranski vitroplast FR4 dvojele 0.8mm

LC sita za SA
26/1/1998

Slika.9

30mm X 120mm

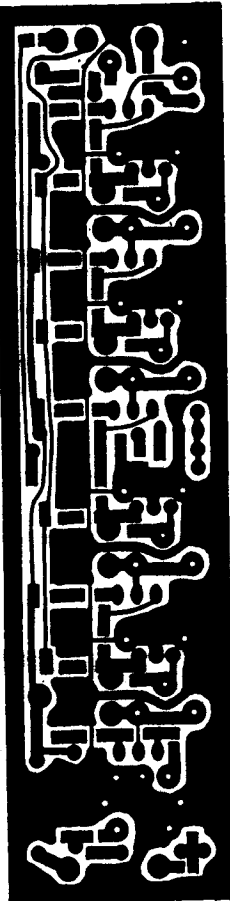




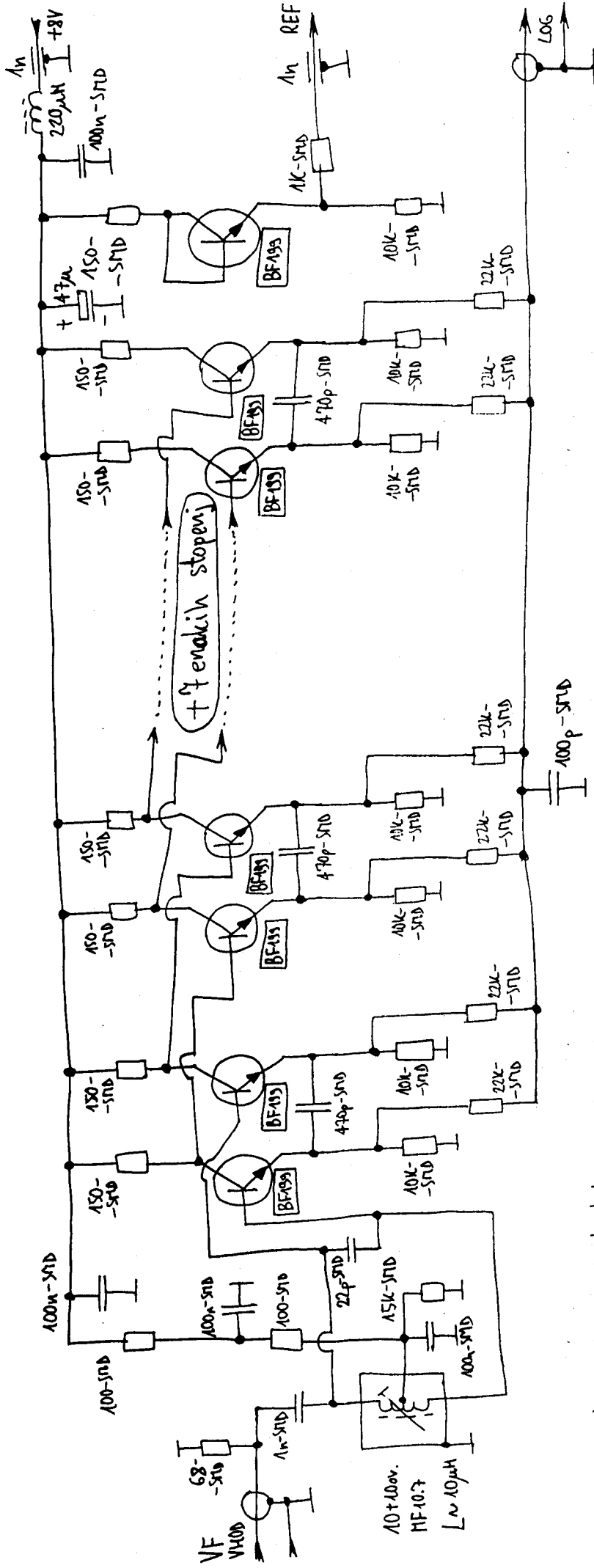
enostranski vitroplast FR4 debeline 0.8mm

Kristalno sito za SA
7/2/1998 S53MV

Slika 10



30mm x 120mm



Logaritemski detektor 10MHz

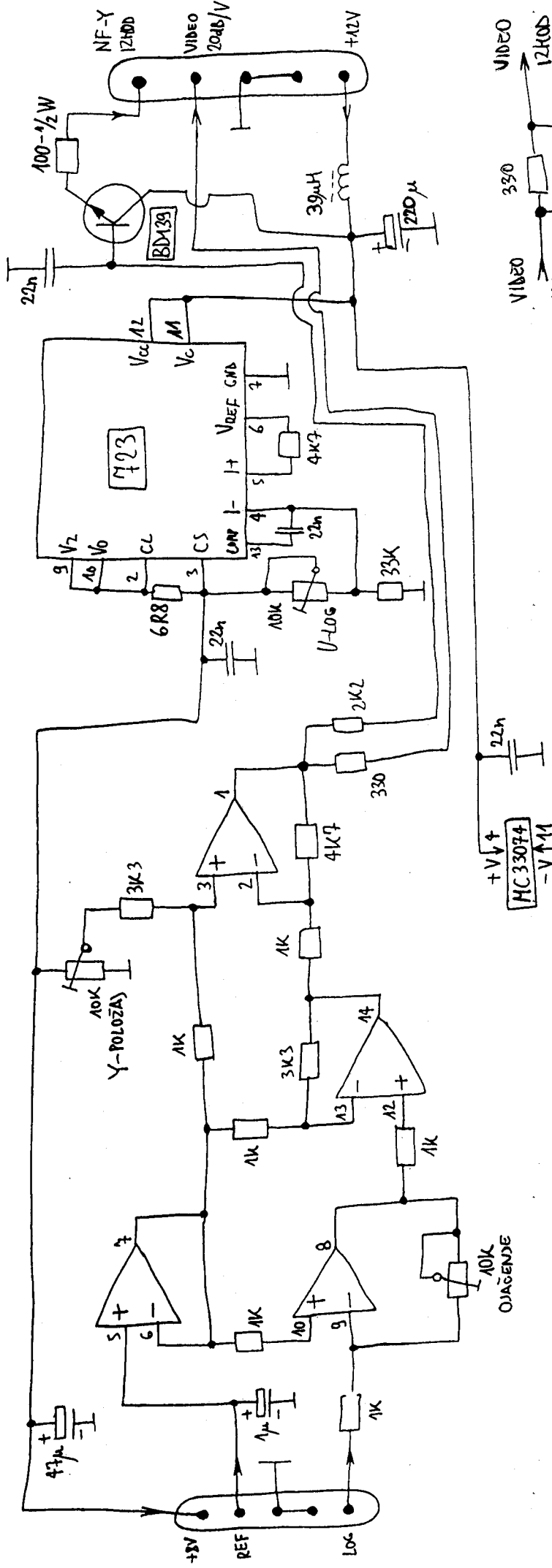
SS3MV 2/1/1998

Slika 11

enostranski vitroplošt FR4 debeline 0.8mm



120 x 30

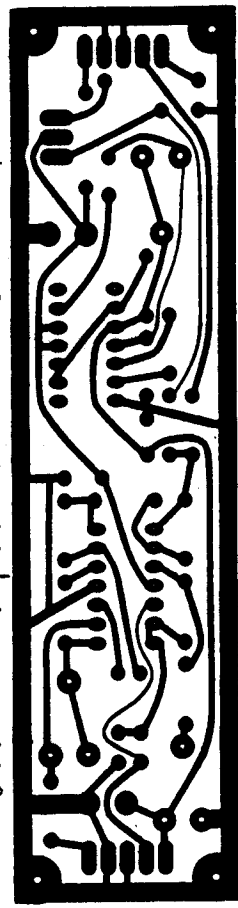


Video ojačevalnik + NF

SS3 MV 9/2/1998

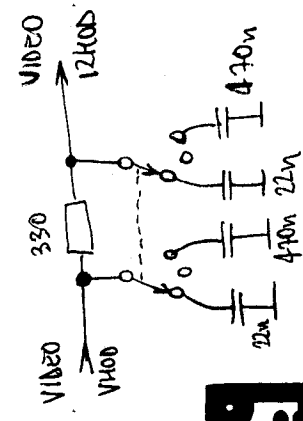
Slivka A2

enostavski vitroplast FR4 debeline 1.6mm

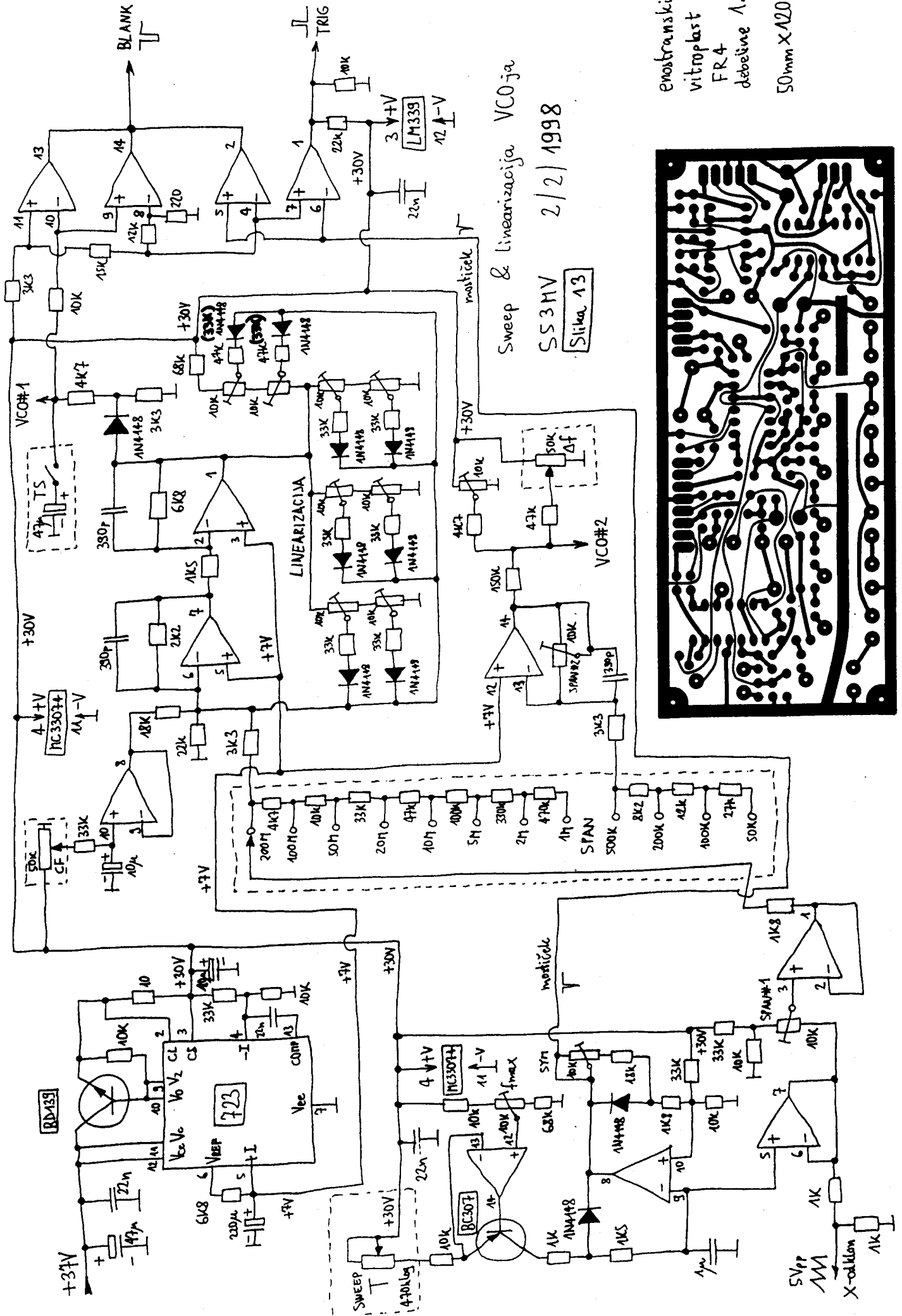


30mm x 120mm

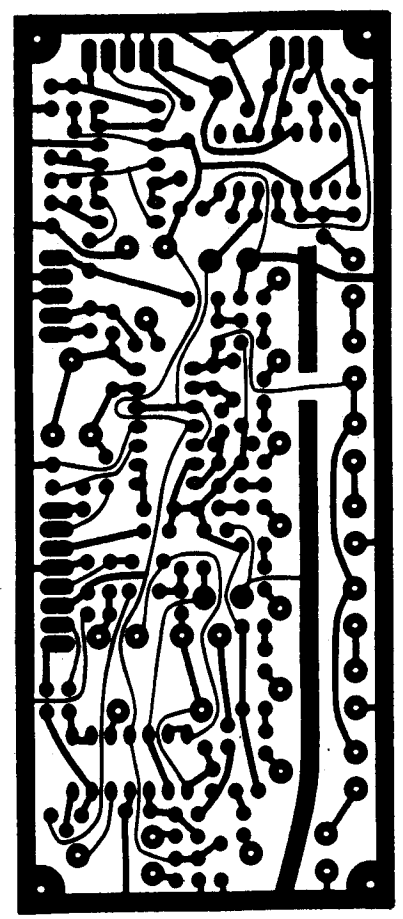
Video sito 20/500/1kHz

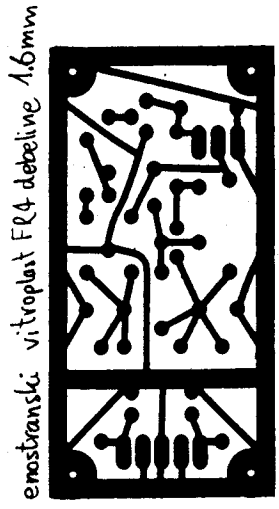
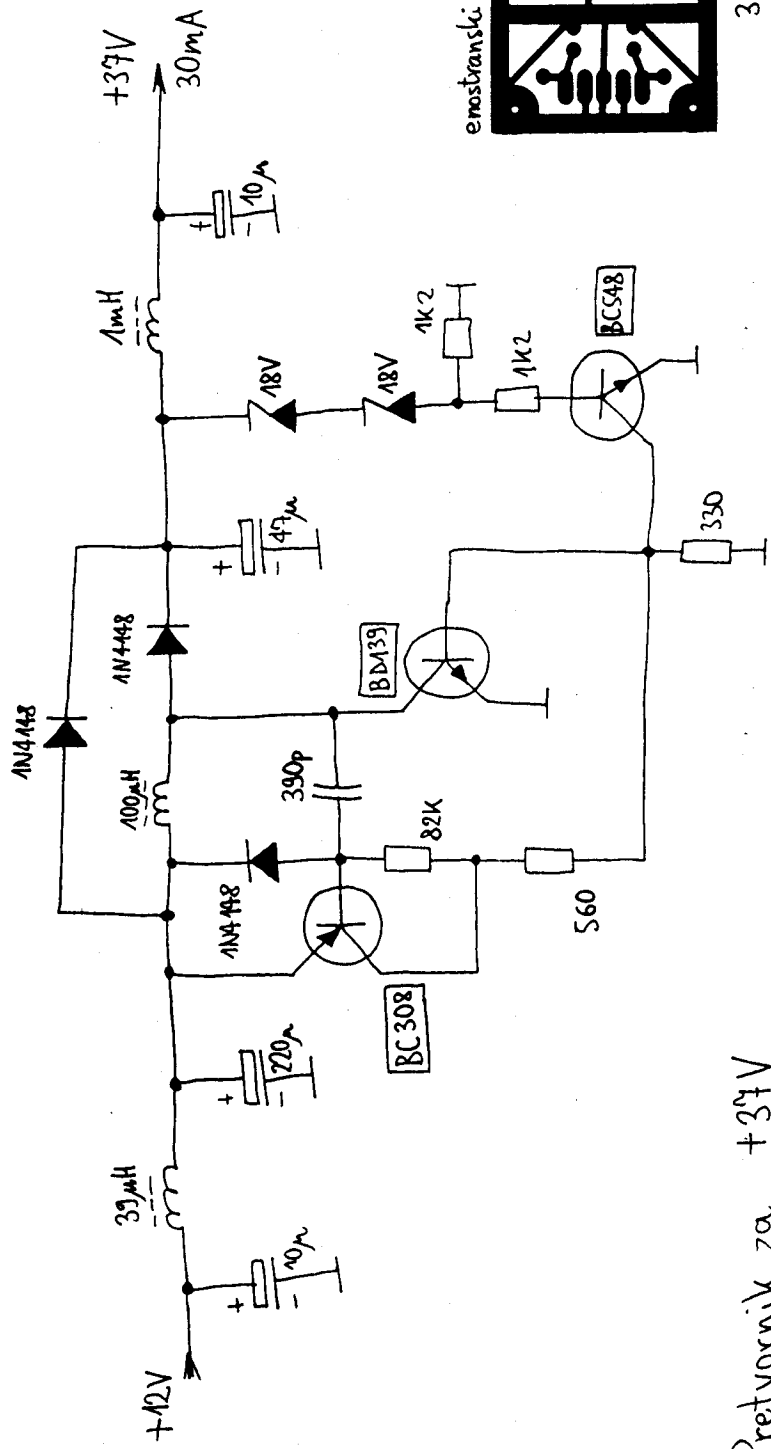


enostranski
vitroplast
FR4
debeline 1.6mm
50mm X 120mm



Sweep & linearizacija VCO ja
SS 3 MV
Slika 13
2/2/1998



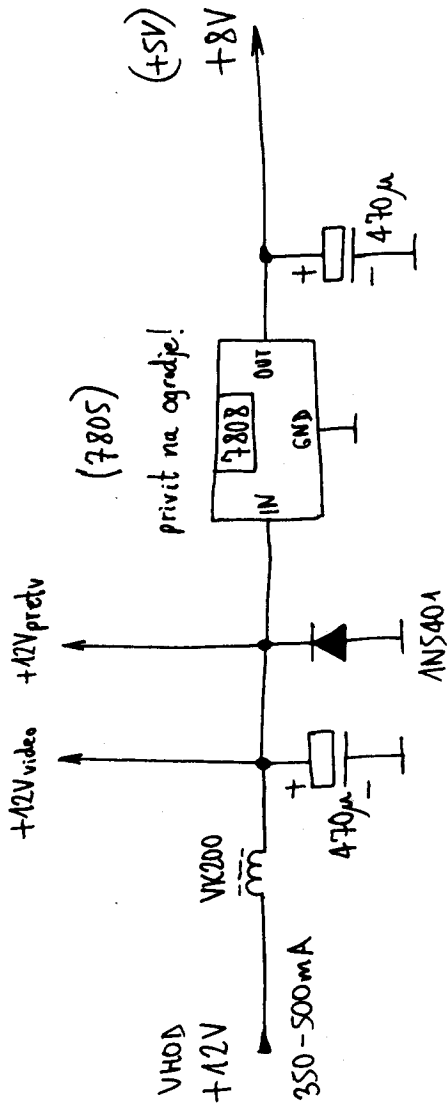
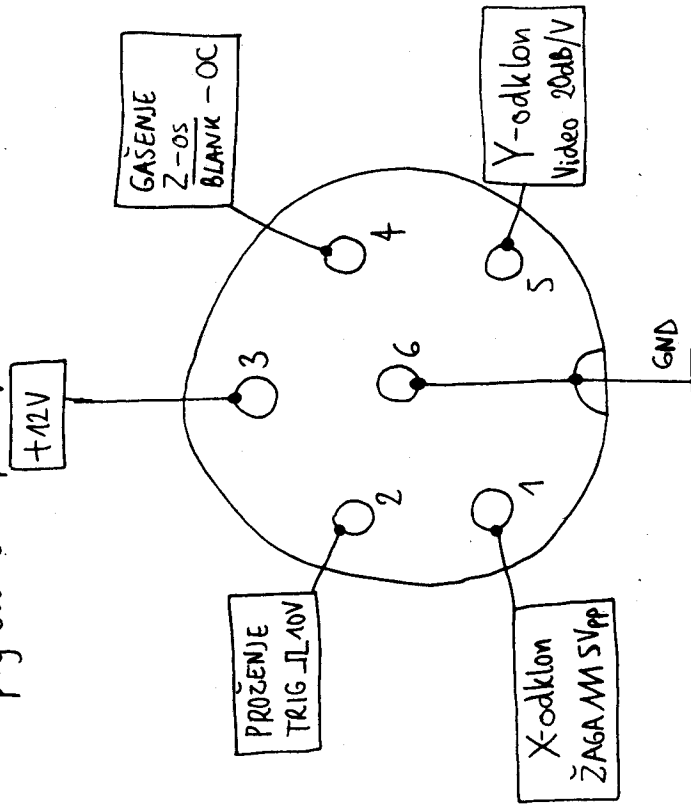


Pretvornik za +37V

SS3MV 2/2/1998

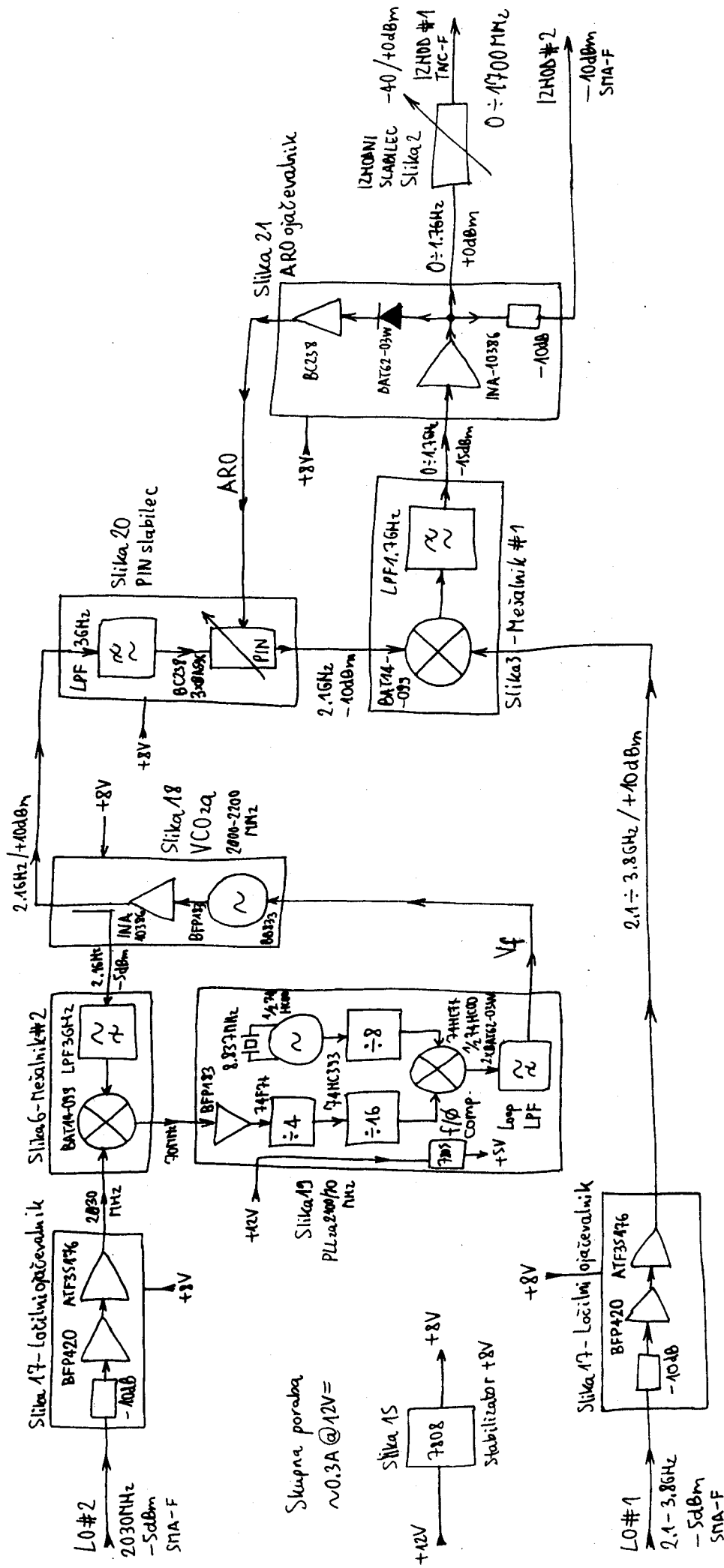
Slika 14

DIN 6 polna vtičnica / 270°
pogled od spredaj



Vezava napajanja SA
SS3MV 18/2/1998

Slika 15

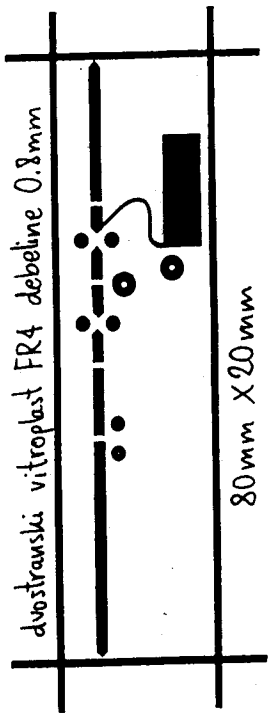
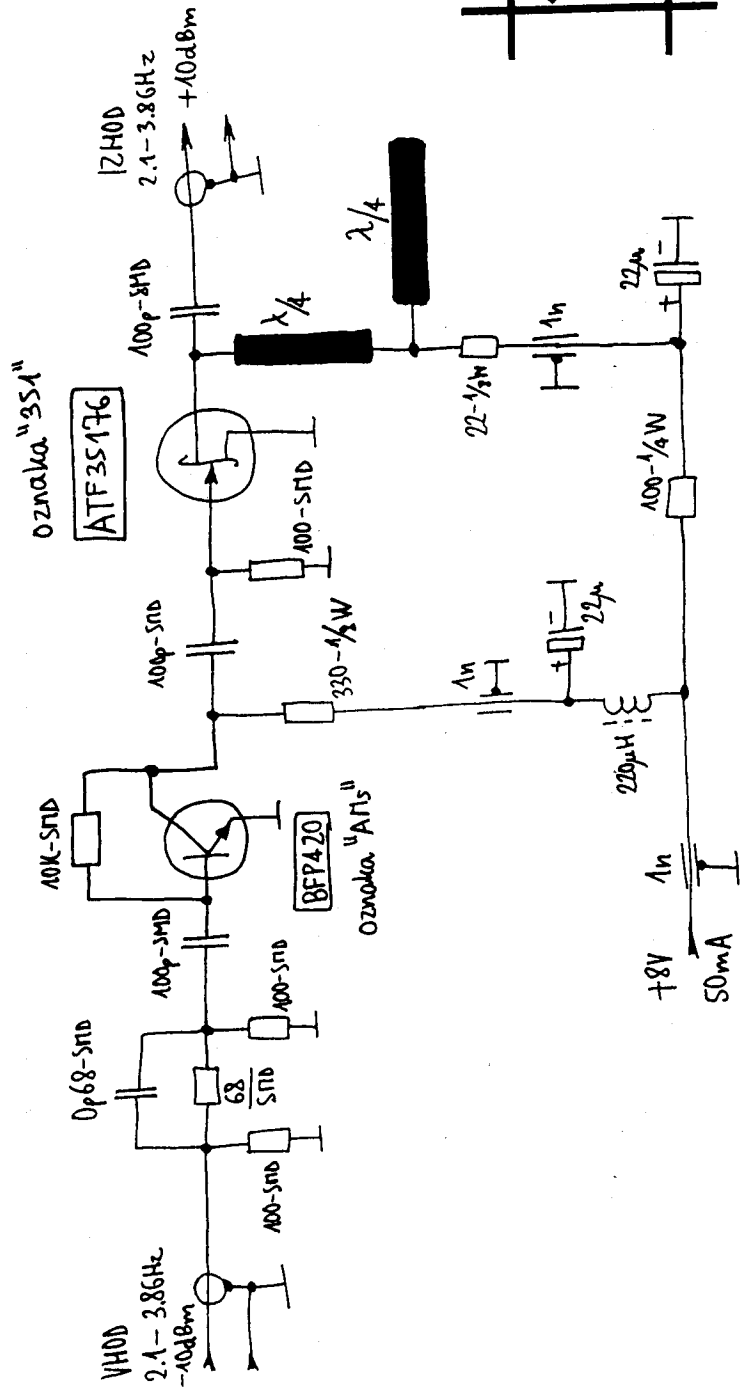


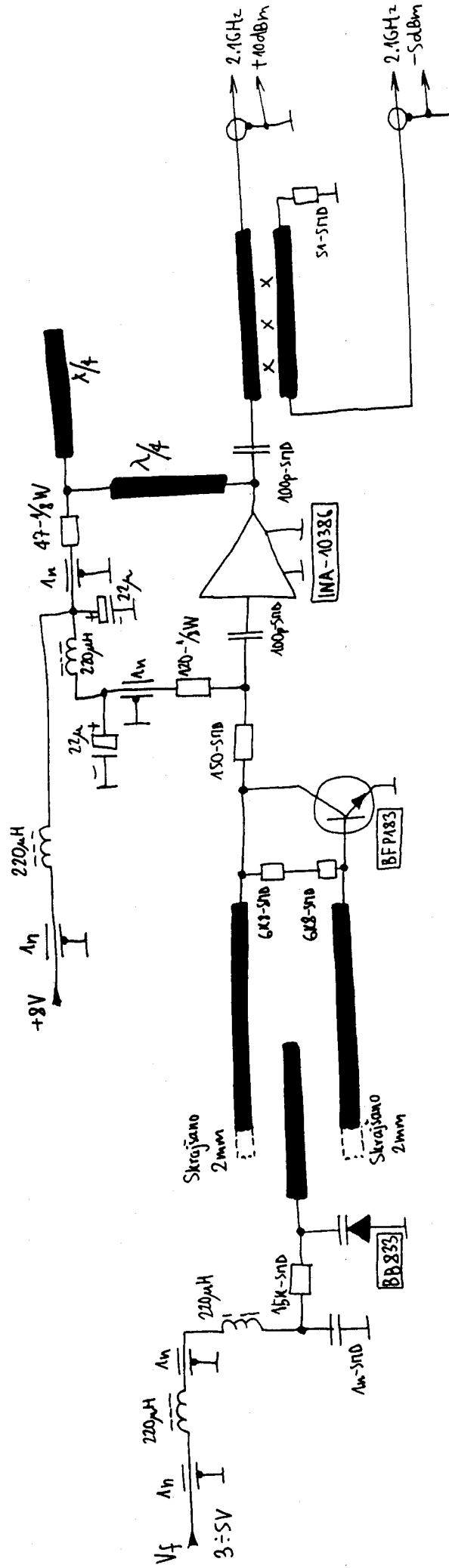
S53MV 22/3/1998

0 ÷ 1700 MHz.

Slika 16 - Blokorni načrt sledilnega izvora

Ločilni ojačevalnik za T6
 SS3 MV 6/6/1998
 Slika 17





VCO za 2000 - 2200 MHz

SS3 MV 22/2/1998

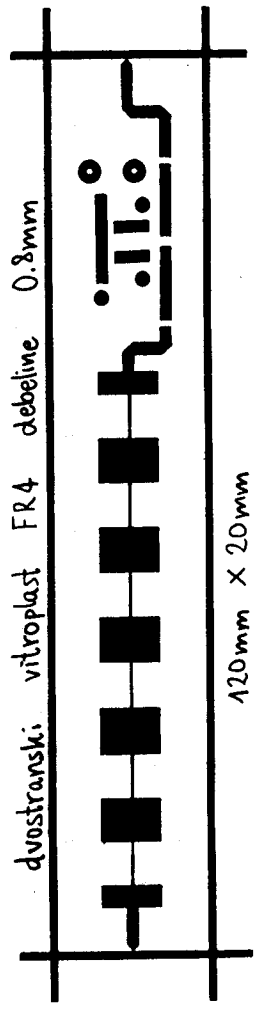
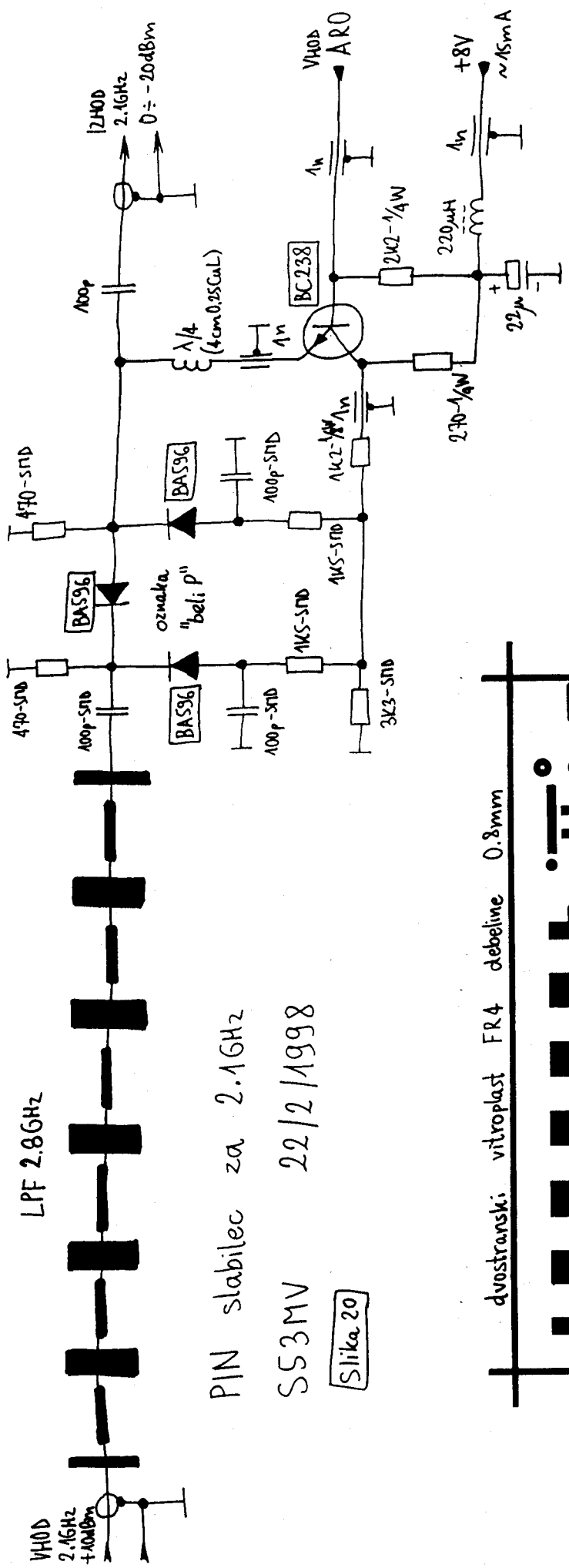
Slika A8

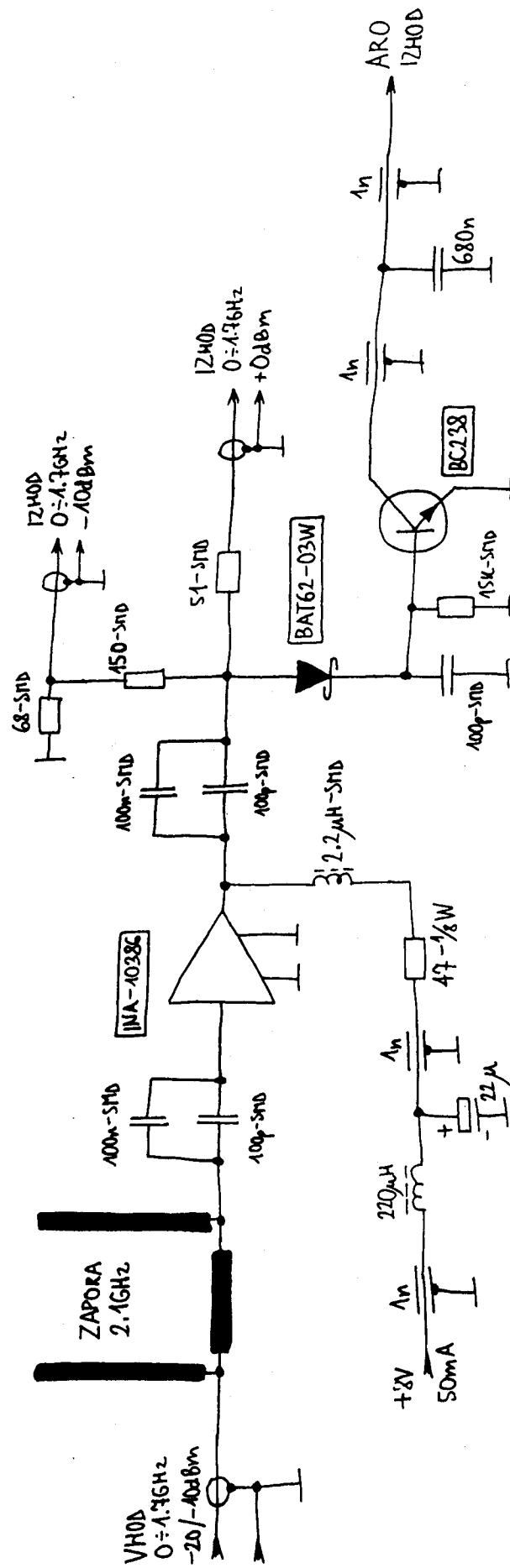
dvostranski vitroplošt FR4 debeline 0.8mm



80mm x 20mm

Ista tiskalina
skrajšani vodi!



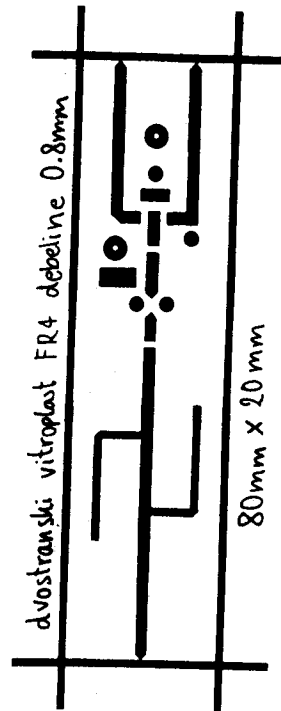


ARO ojačevalnik 0 ÷ 1.7 GHz

SS3 MV

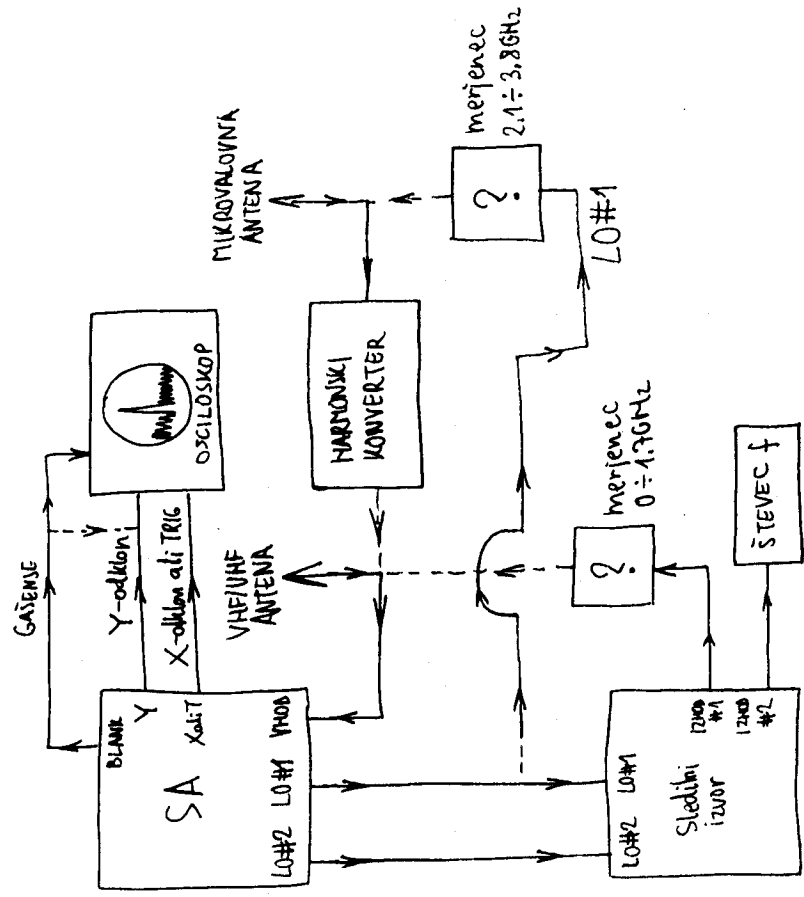
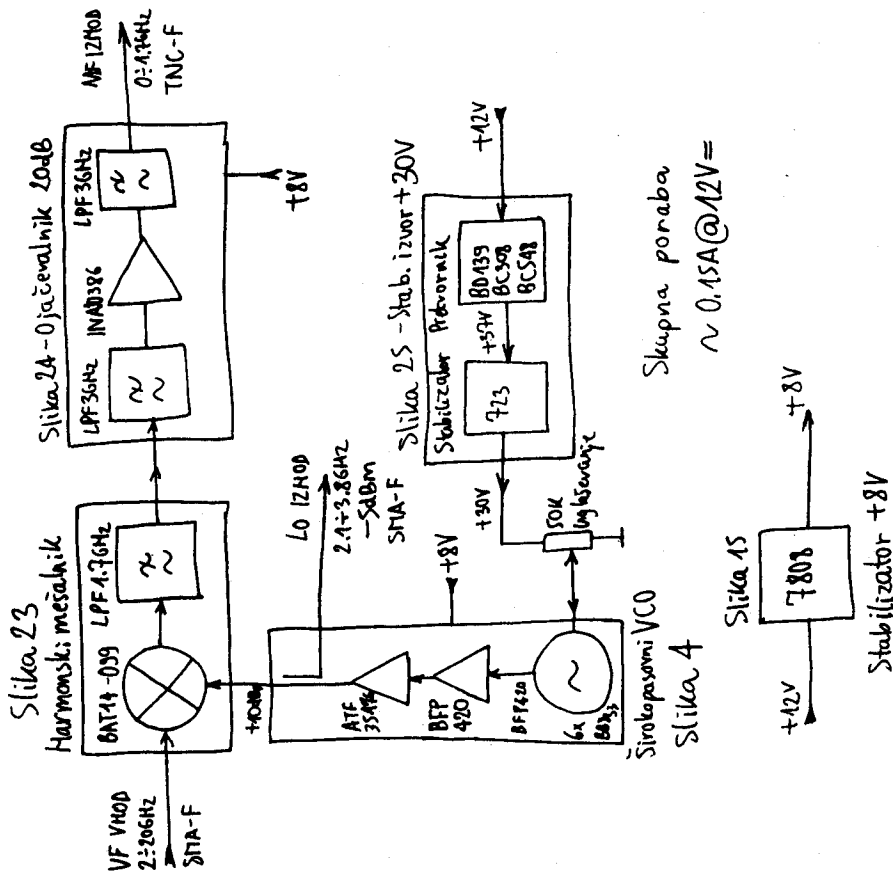
22/2/1998

Slika 21

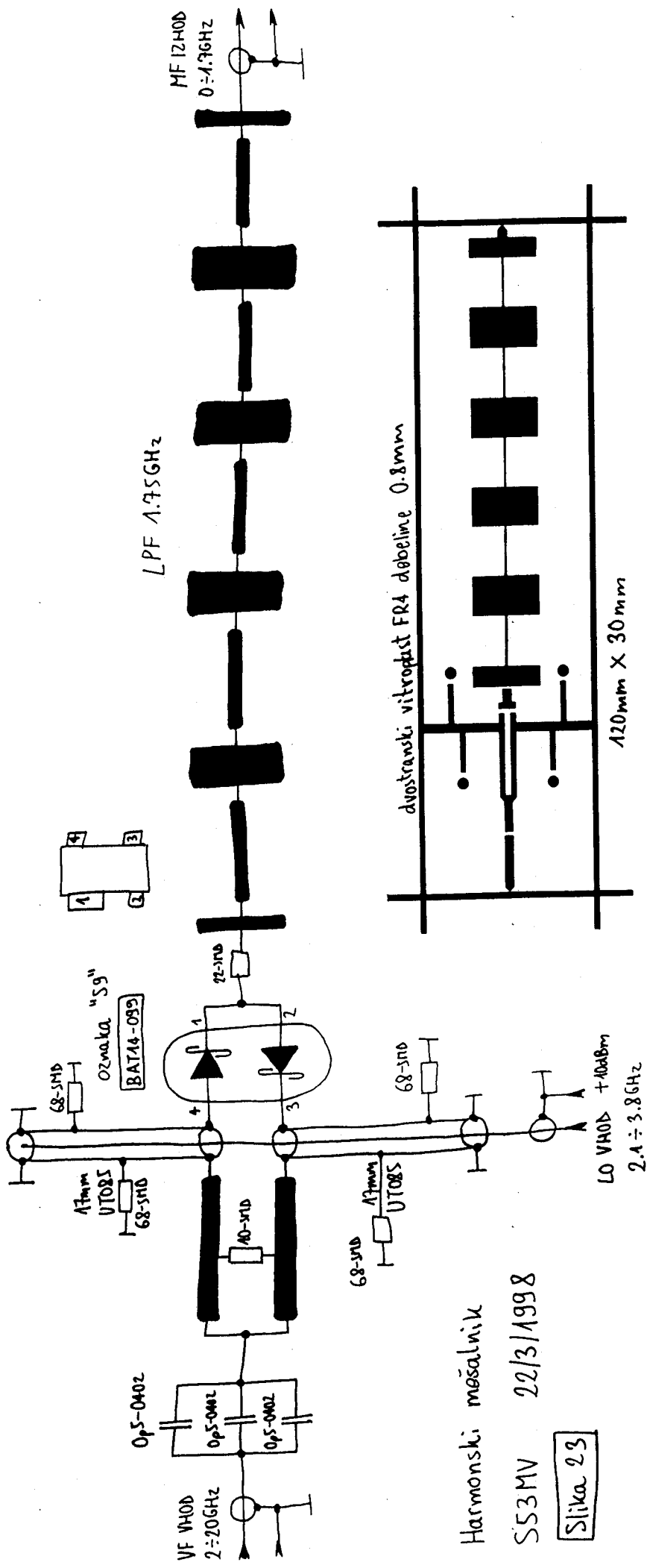


dvostranski vitroplast FR4 debeline 0.8mm

80mm x 20 mm



Slika 22 - Blokovi načrt harmonskega konverterja za SA.



Harmonski meralniki

S53 MV 22/3/1998

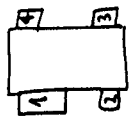
Slika 23

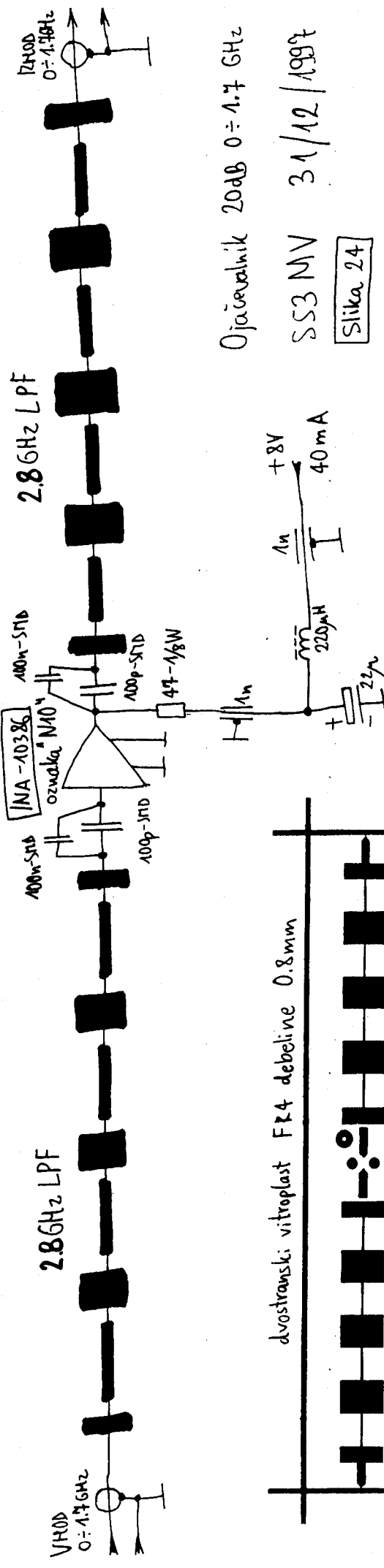
LO VH0D +10dBm
2.4 ÷ 3.8 GHz

LPF 1.75 GHz

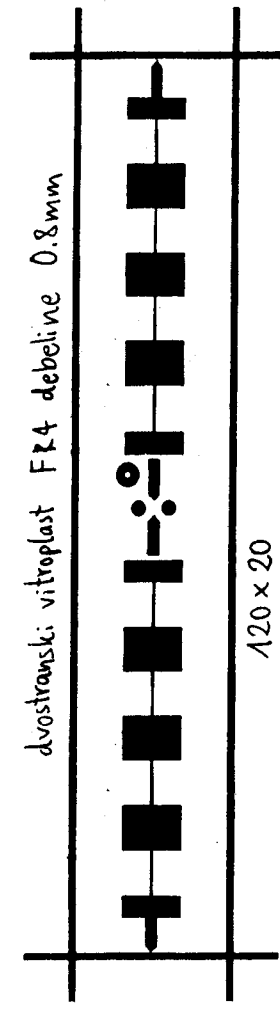
diostranski vitropust FR4 debeline 0.8mm

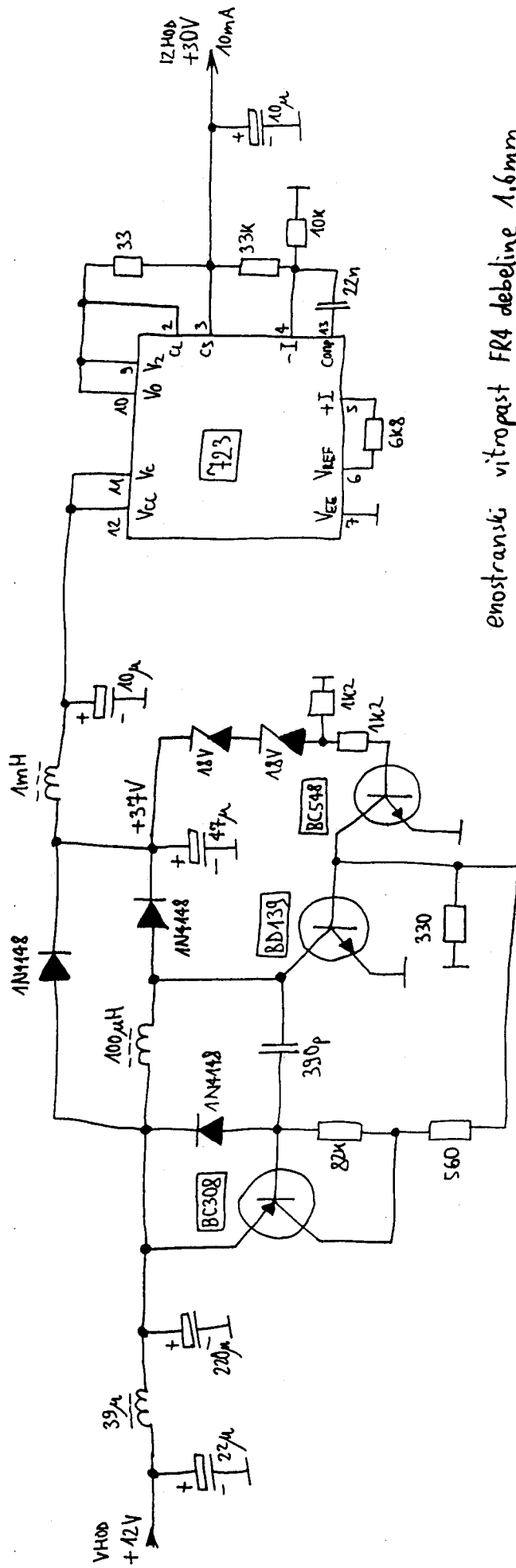
120mm X 30mm





Ojačevalnik 20dB 0 ÷ 1.7 GHz
 SS3 MV 31/12/1997
 Slika 24





Stabilizirani izvor +30V

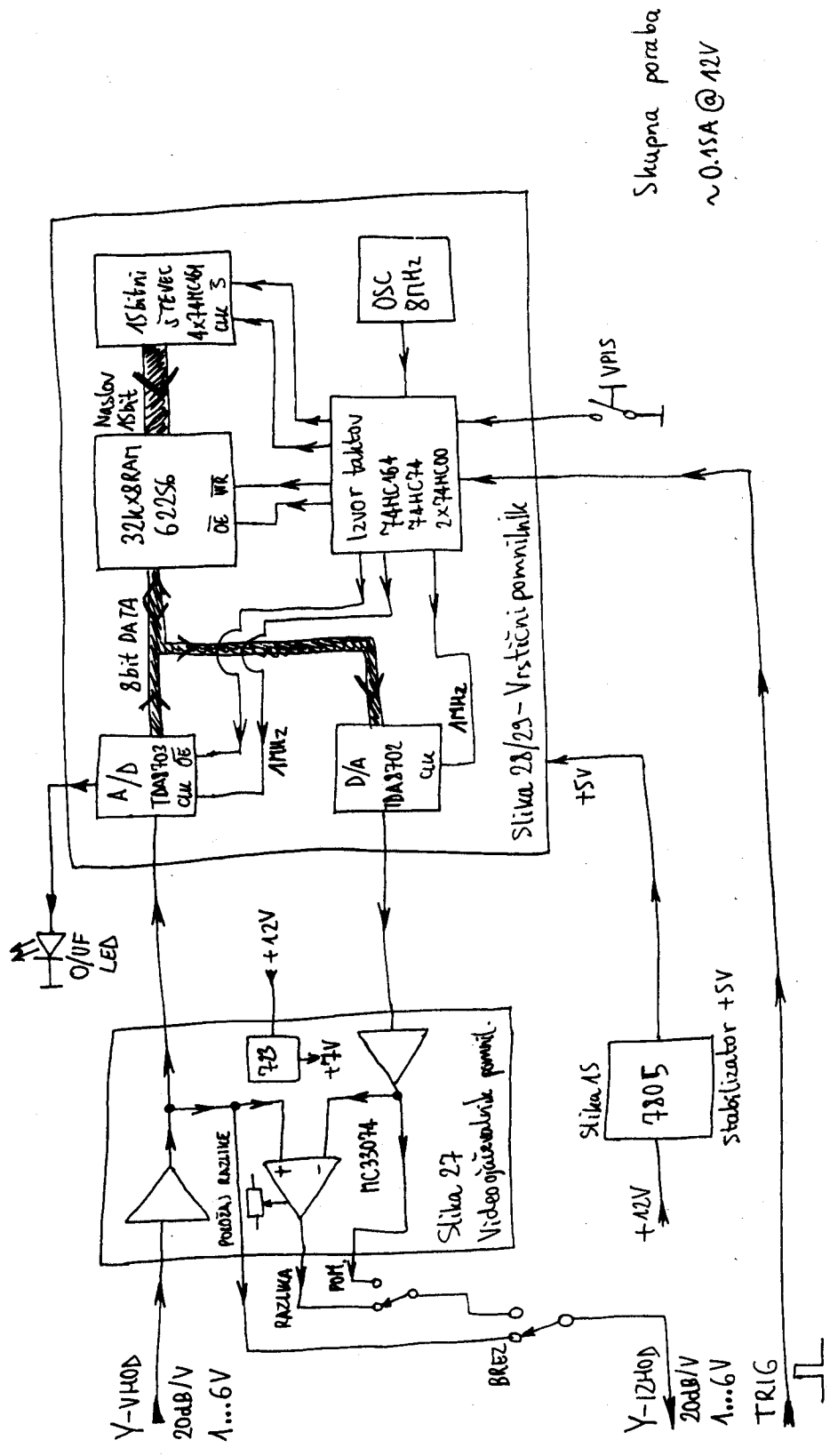
SS3MV 22/3/1998

Slika 25

enostranski vitropast FR4 debljine 1,6mm

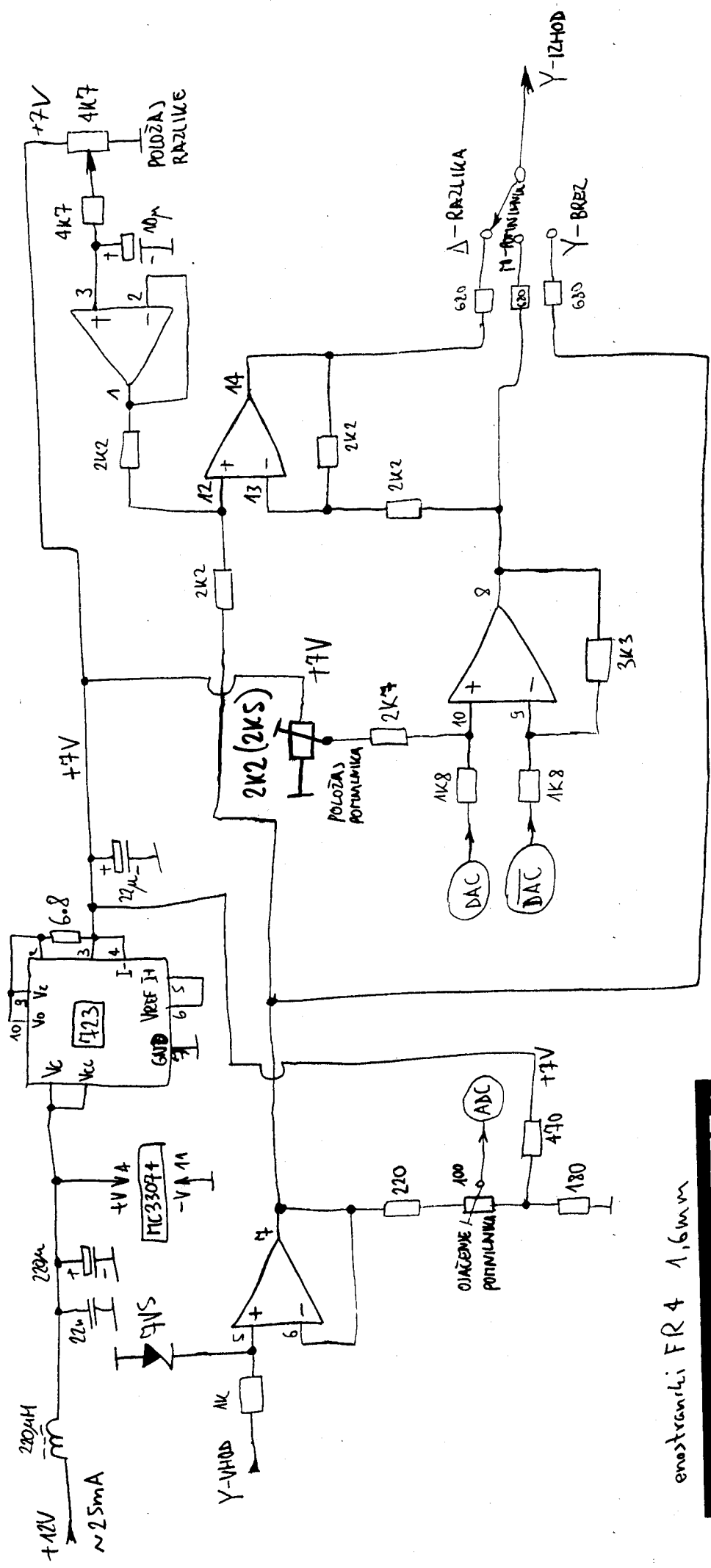


80mm X 30mm



Skupna poraba
~0.15A @ 12V

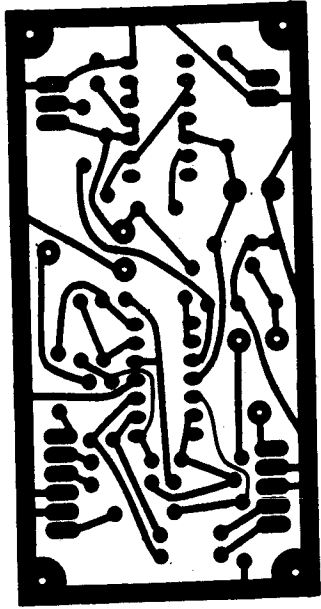
Slika 26 - Blokovi načrt pomnilnika / normalizatorja.



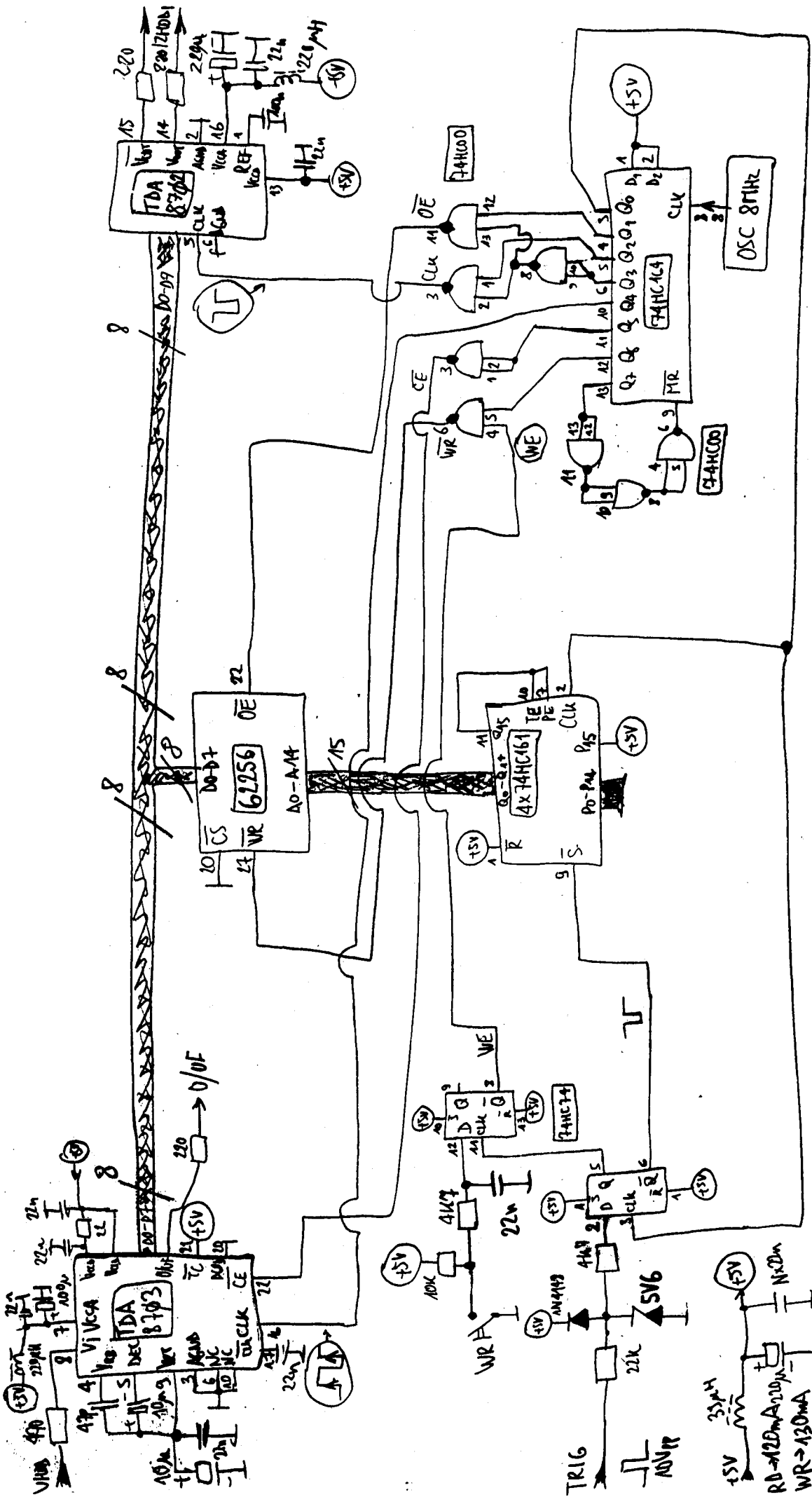
Video ojačevalnik pomnilnika
 SS3 MV 5/4/1998

Slika 27

enostranski FR 4 1,6mm



40mm x 80mm

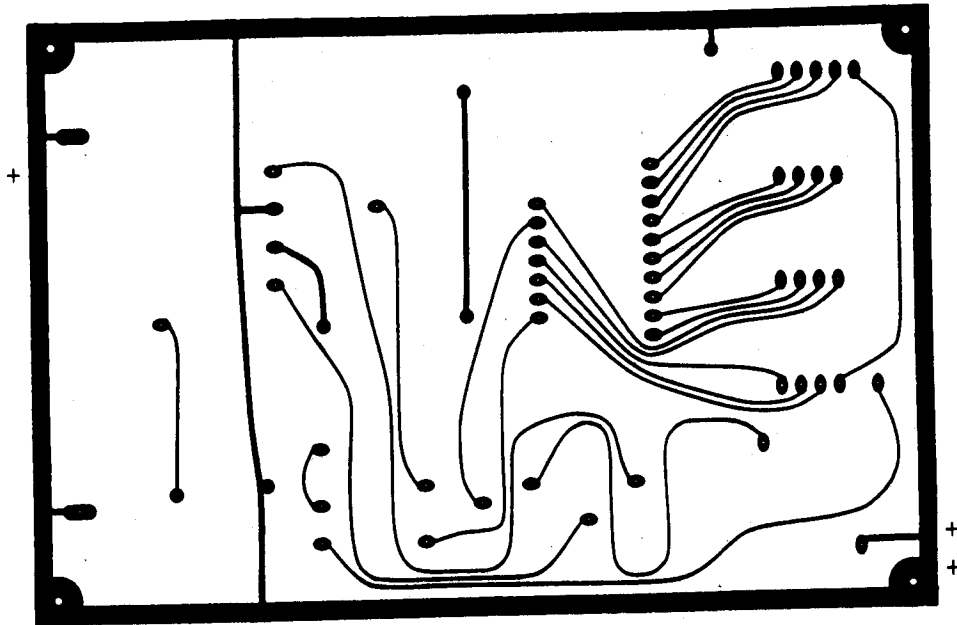


Vrstični pomnilnik

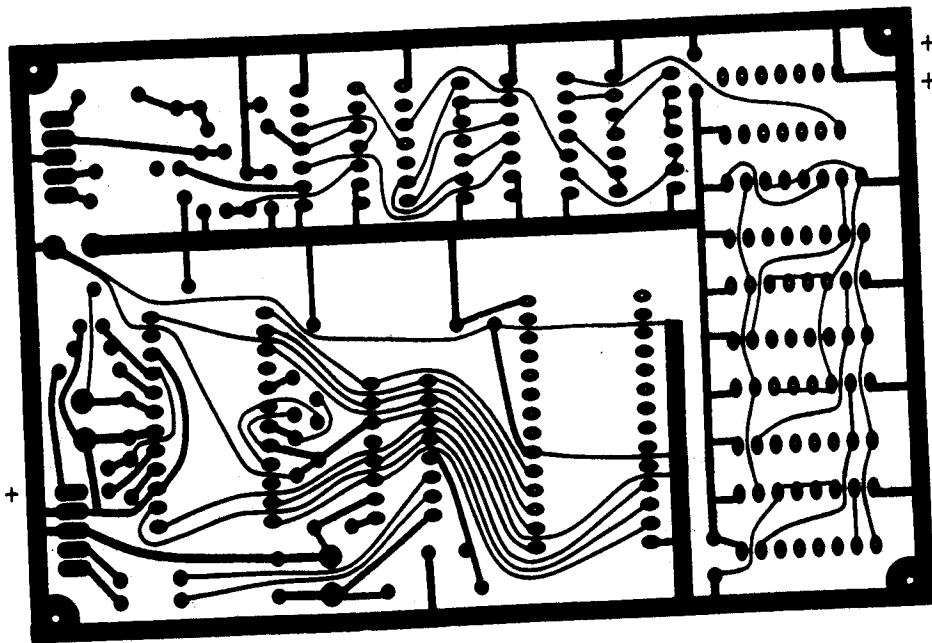
SS3MV 3/4/1998

Slika 28

ZGORAJ



Vrstični pomnilnik
dvostranski FR4 debeline 1.6mm
80mm X 120mm

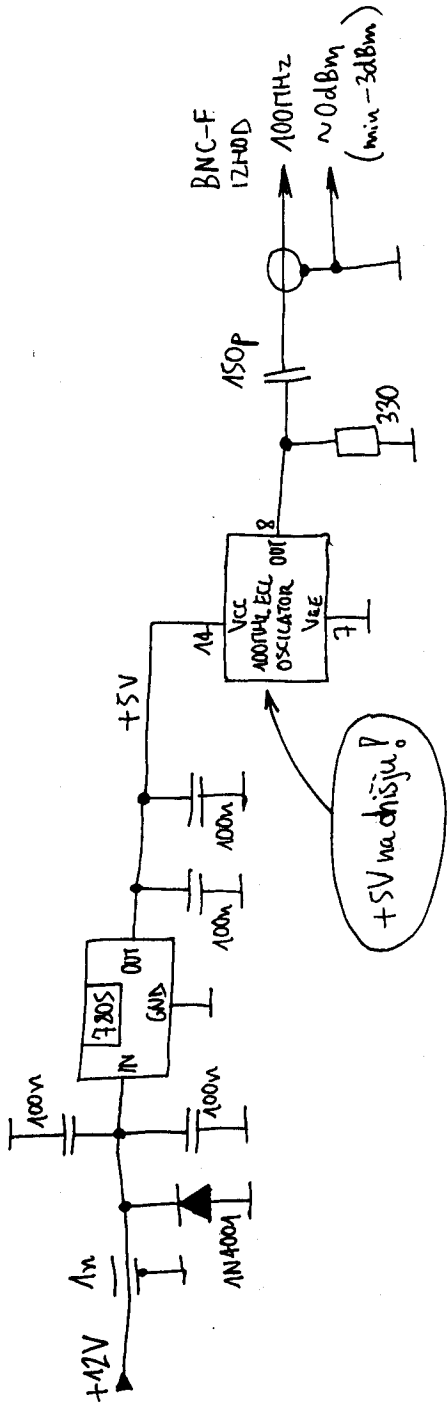


SPODAJ

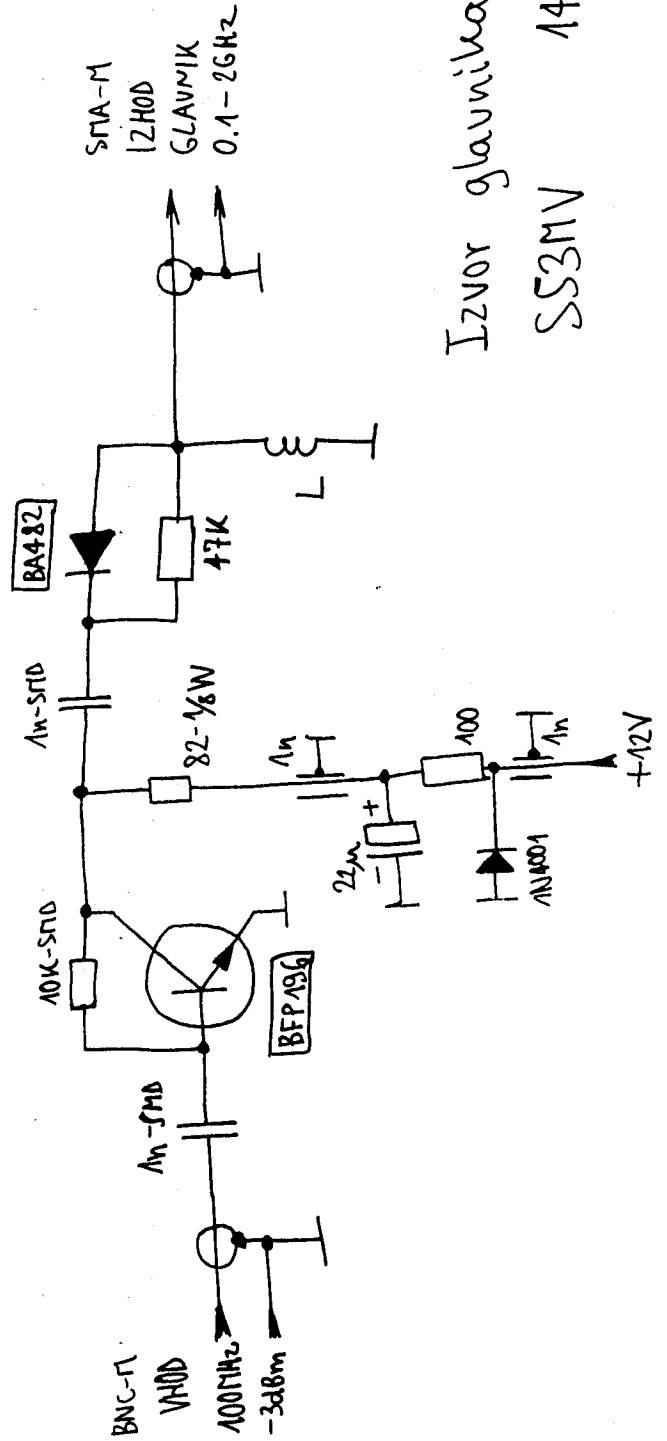
Slika 29 - Tiskanina vrstičnega pomnilnika.

Izvor 100MHz / -3dBm
 SS3MV 10/4/1998

Slika 30



BNC-F
 IZHOD
 100MHz
 ~0dBm
 (min -3dBm)



Izvor glavnika 0.1-2GHz
 SS3MV 14/2/1998