

This text was taken from: <http://www.geocities.com/SoHo/Museum/4459/>

A first and very good hint came from K. Tanaka (two transistors as variable transconductance elements). There was some speculation about it by Jürgen Haible and some hints by Osamu Hoshuyama who actually gave me the address of some of the former developers of the KORG MS20. I thought I could give it a try and wrote a letter to KORG INC. Japan and I never expected any response. But I was wrong. Only a few days later a nice letter arrived, with detailed schematics!

NOTE:

The circuit schematics are property of the KORG INC. ! They are displayed here for educational purposes only ! The KORG INC. will take legal measures on any attempt to draw economic advantage out of this data !

The data is presented as gif scans, about 5000x5000 pixels

PDF by Jocke

KORG

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Tel:813-5376-5215 Fax:813-5376-6088

TO : Mr. Martin Czech
FROM : Yasuhiko Mori
Subject :

Date : Dec. 5, 2000

Dear Mr. Czech,

Thank you for your writing .

I appreciate heartily that you have been using Korg products for a long time.

I am Yasuhiko Mori, a general manager of new product development at Korg.

I have received your letter from my superior, Mr. Saegusa.

Actually his name is Mr. Mieda but we also sound his character as "Saegusa" in Japanese.

In reply to your request and question,

Enclosed are the inner circuit and inner elements of KORG35.

To open this information to you can be possible only because this product was released 23 years ago. So please note that this information must be stayed in your personal interest.

We can not permit that you or others use this information to take economically advantage.

And please note that if we judged we would suffer a loss due to the opening of this information to you, we shall have a case to exercise legislative measures.

Please be sure to be very careful with this information.

The basic design of the hybrid IC KORG35 used for MS-20 was designed by Mr. Mieda.

And MS-20 was designed by me.

Please contact me directly if you have any question about the Korg's Vintage synthesizer such as MS-20 and etc. by email or mail.

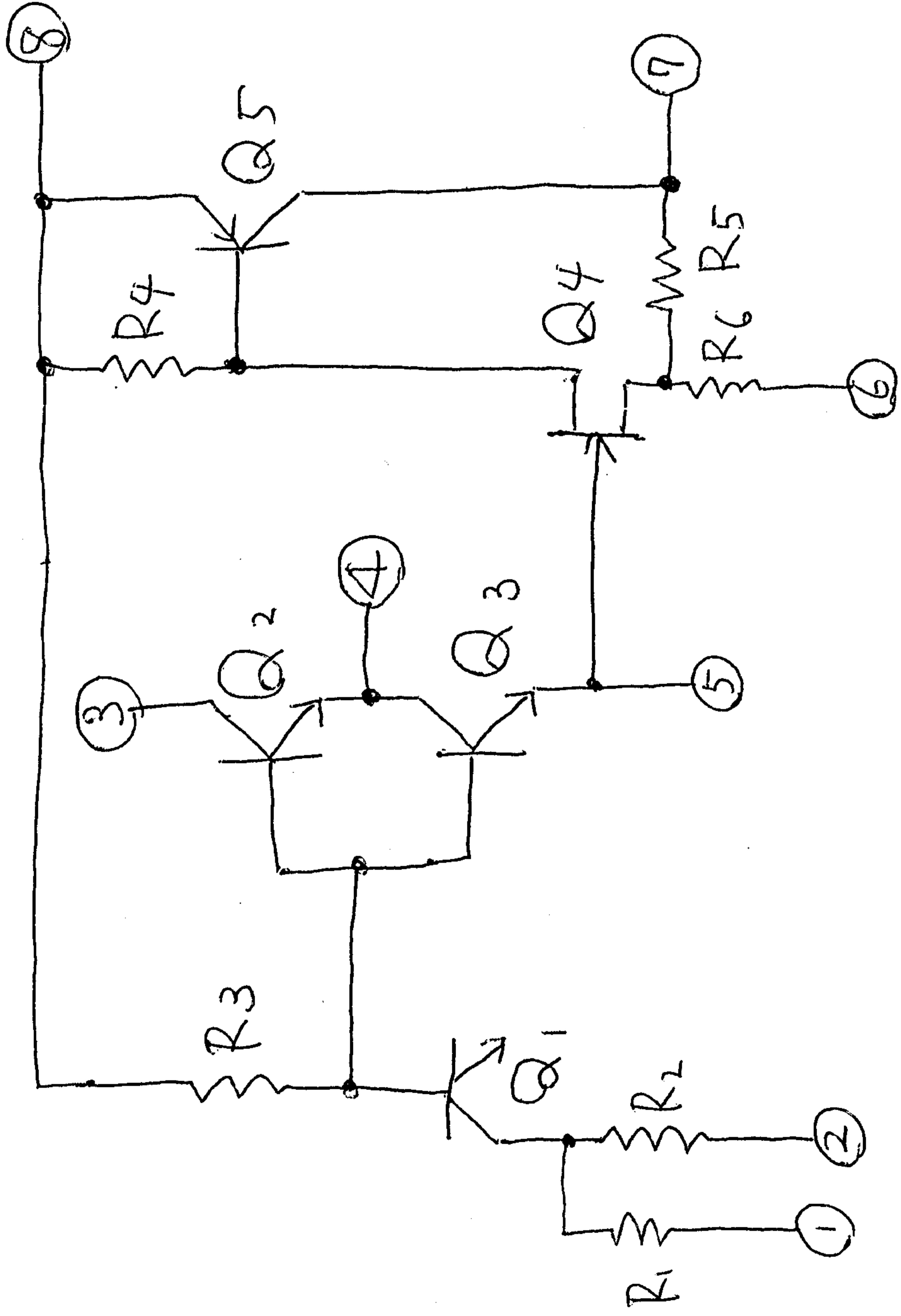
I can give you the information as a reference that these books titled 'Vintage Synthesizer (Vol.1,2 - written by Mark Vail - technical editor) ' are published from " Keyboard magazine " if you would like to know about each model of Vintage synthesizer.

Best Regards,


Yasuhiko Mori

KORG 35

Circuit Diagram



$$R_1 = 47k\Omega$$

$$R_2 = 680\Omega$$

$$R_3 = 470k\Omega$$

$$R_4 = 10k\Omega$$

$$R_5 = 820\Omega$$

$$R_6 = 10k\Omega$$

$$Q_1 = 2SC1623$$

$$Q_2 = 2SC1623$$

$$Q_3 = 2SC1623$$

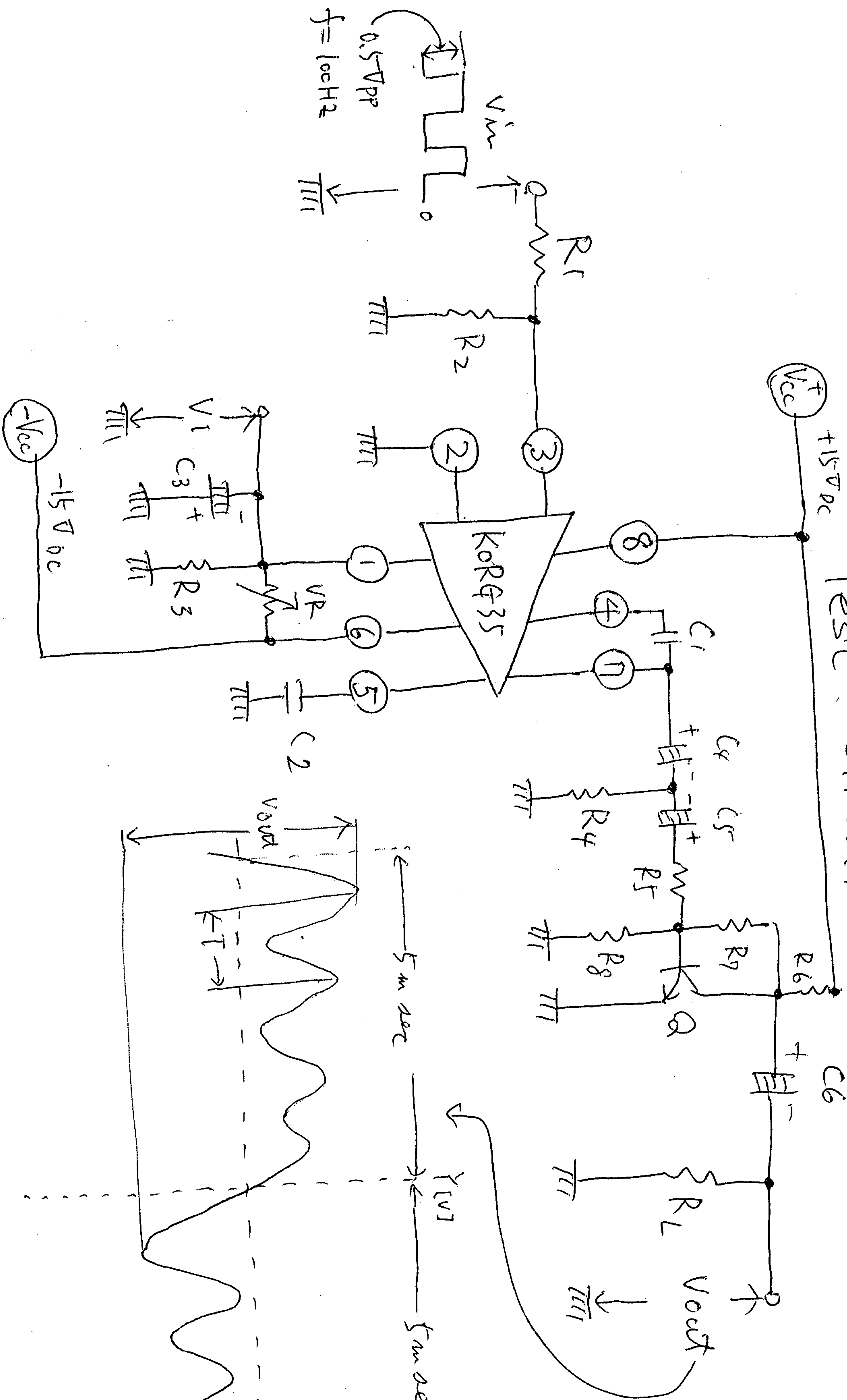
$$Q_4 = 2SK94$$

$$Q_5 = 2SA812$$

Drawing By Yasuhiko Meri
12/5

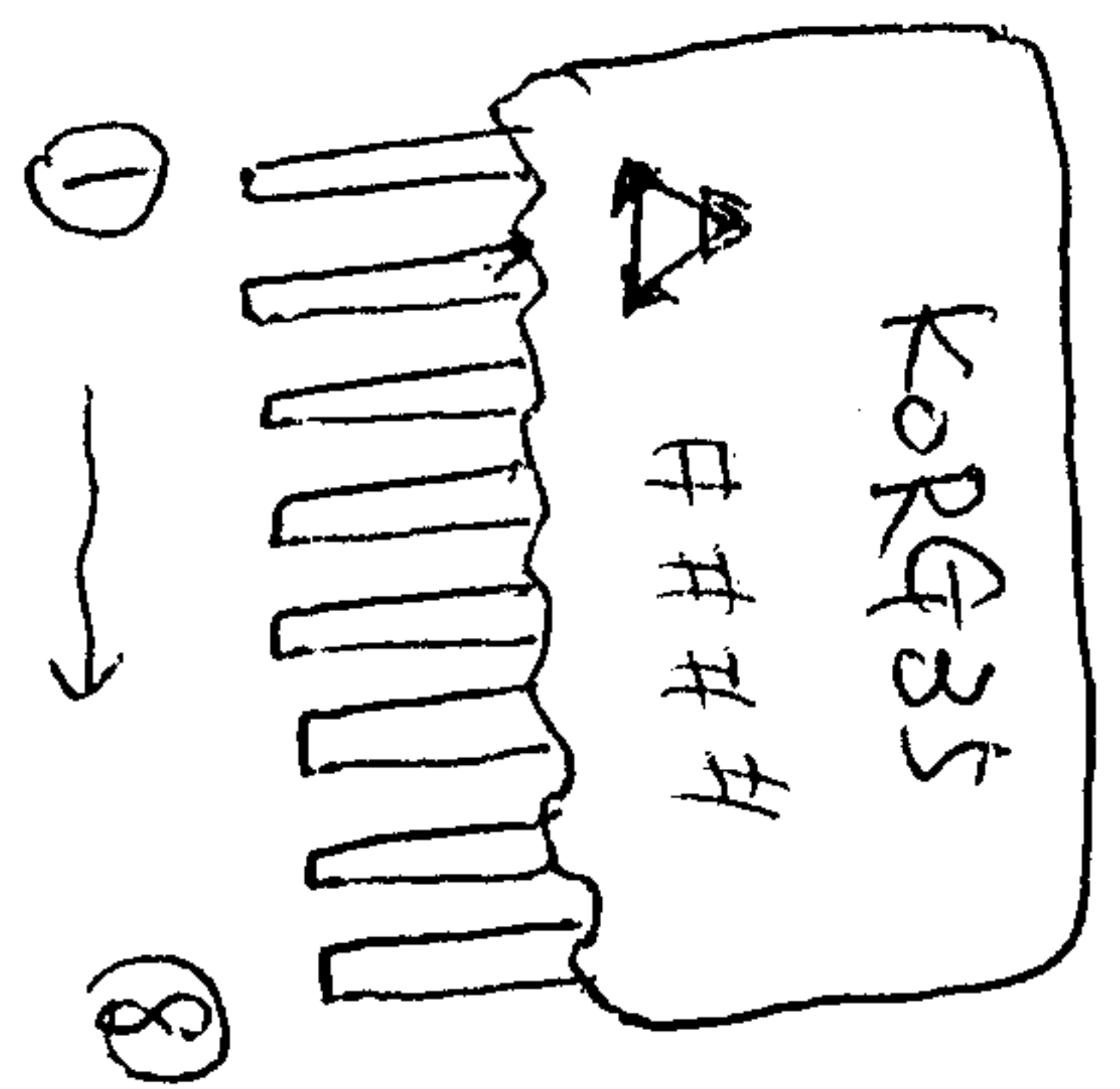
KORQ35

Test Circuit



- $R_1 = 4.7k\Omega$
- $R_2 = 47\Omega$
- $R_3 = 1.5k\Omega$
- $R_4 = 330\Omega$
- $R_5 = 1.0k\Omega$
- $R_6, R_8 = 10k\Omega$
- $R_7, R_9, R_L = 100k\Omega$
- $V_R = 2k\Omega$ VR

- $C_1 = 47000\text{ PF}$
- $C_2 = 1500\text{ PF}$
- $C_3 = 33\mu\text{F } 25\text{V}$
- $C_4, C_5 = 100\mu\text{F } 25\text{V}$
- $C_6 = 10\mu\text{F } 25\text{V}$
- $Q = 2SC664\text{ ST}$



Drawing By Yasuhiko Inami
2000. 12/5.