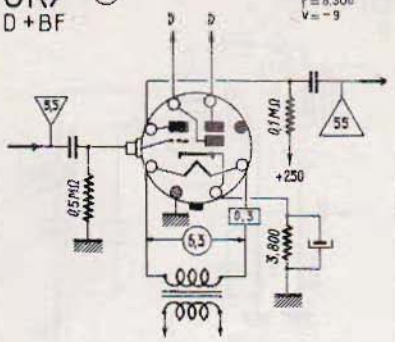
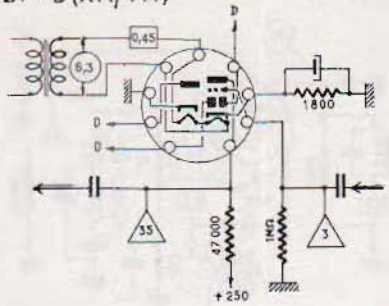
6R7 ⓪
D + BF

S = 1,9
ρ = 8.500
V = −9



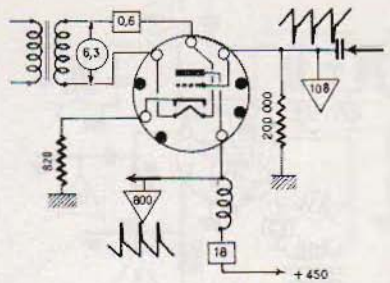
6R8 Ⓝ
BF + D (AM/FM)

S = 1,9
ρ = 8.500
V = −9



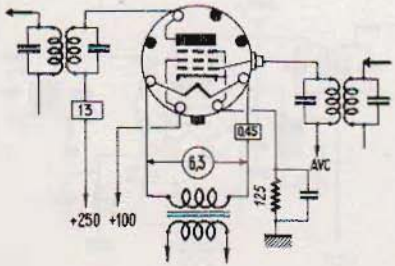
6S4 Ⓝ
HF (T)

S = 4,5
ρ = 3.600
V = −8



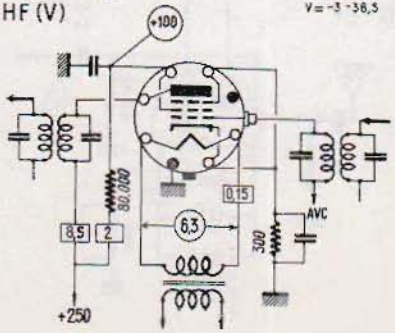
6S6 ⓪
HF (V)

S = 4
ρ = 0,35 MΩ
V = −2 −25



6S7 ⓪
HF (V)

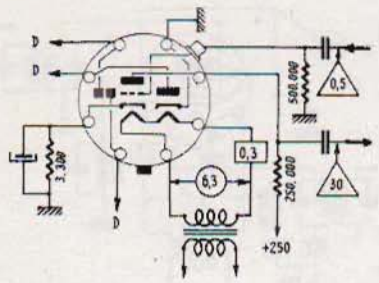
S = 1,7
ρ = 1MΩ
V = −3 −36,5



6S2 = EY86
6T8 = EABC80
6U3 = EY80
6V3 = EY81F
6V4 = EZ80

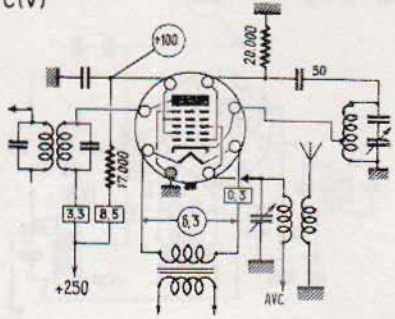
6S8 ⓞ
D+BF (FM)

S = 1,1
ρ = 91.000
V = -1



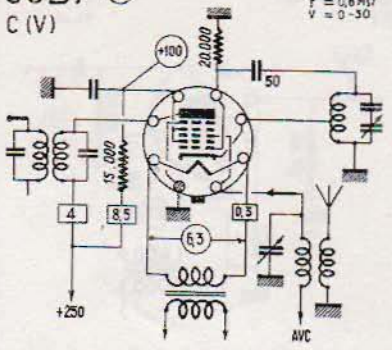
6SA7 ⓞ
C(V)

Sc = 0,45
ρ = 1 MΩ
V = 0-35



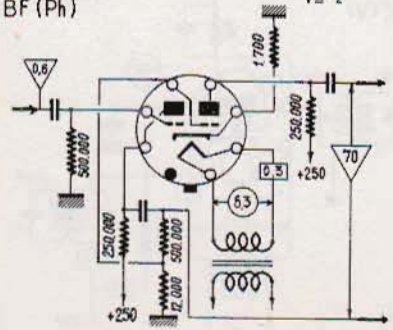
6SB7 ⓞ
C (V)

Sc = 0,88
ρ = 0,8 MΩ
V = 0-30



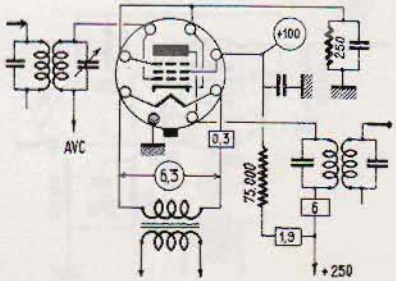
6SC7 ⓞ
BF (Ph)

S = 1,325
ρ = 53.000
V = -2



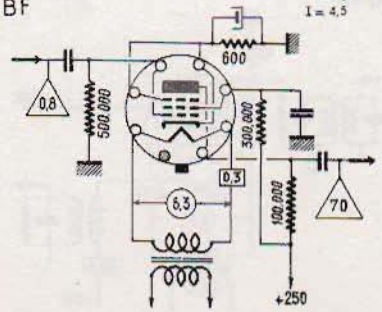
6SD7 ⓞ
HF (V)

S = 3,6
ρ = 1 MΩ
V = -2-25



6SE7 ⓞ
BF

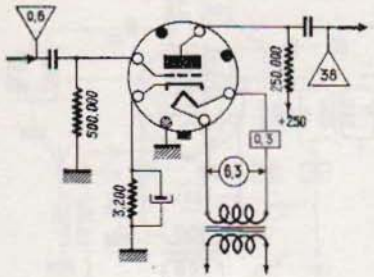
S = 3,4
ρ = 1,1 MΩ
V = -1,5
I = 4,5



6SF5 ⓪

BF

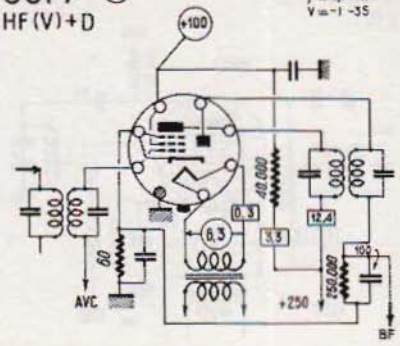
S = 1,5
P = 660000
V = -2



6SF7 ⓪

HF(V)+D

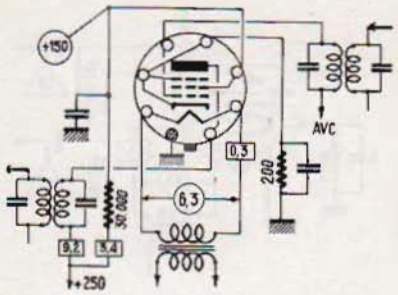
S = 2
P = 0,7 MΩ
V = -1 -35



6SG7 ⓪

HF(V)

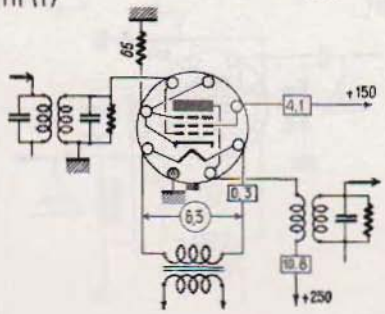
S = 4
P = 1 MΩ
V = -2,5 -17,5



6SH7 ⓪

HF(T)

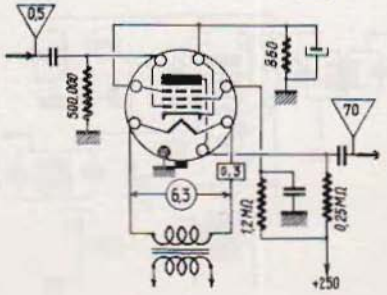
S = 4,9
P = 0,9 MΩ
V = -1



6SJ7 ⓪

BF

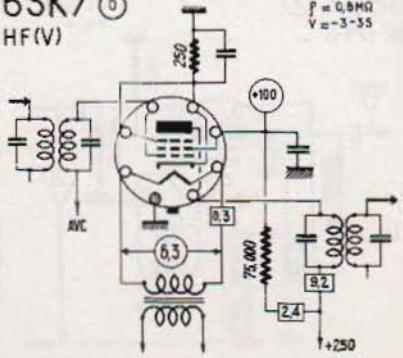
S = 1,6
P = 1,5 MΩ
V = -3
I = 9,2

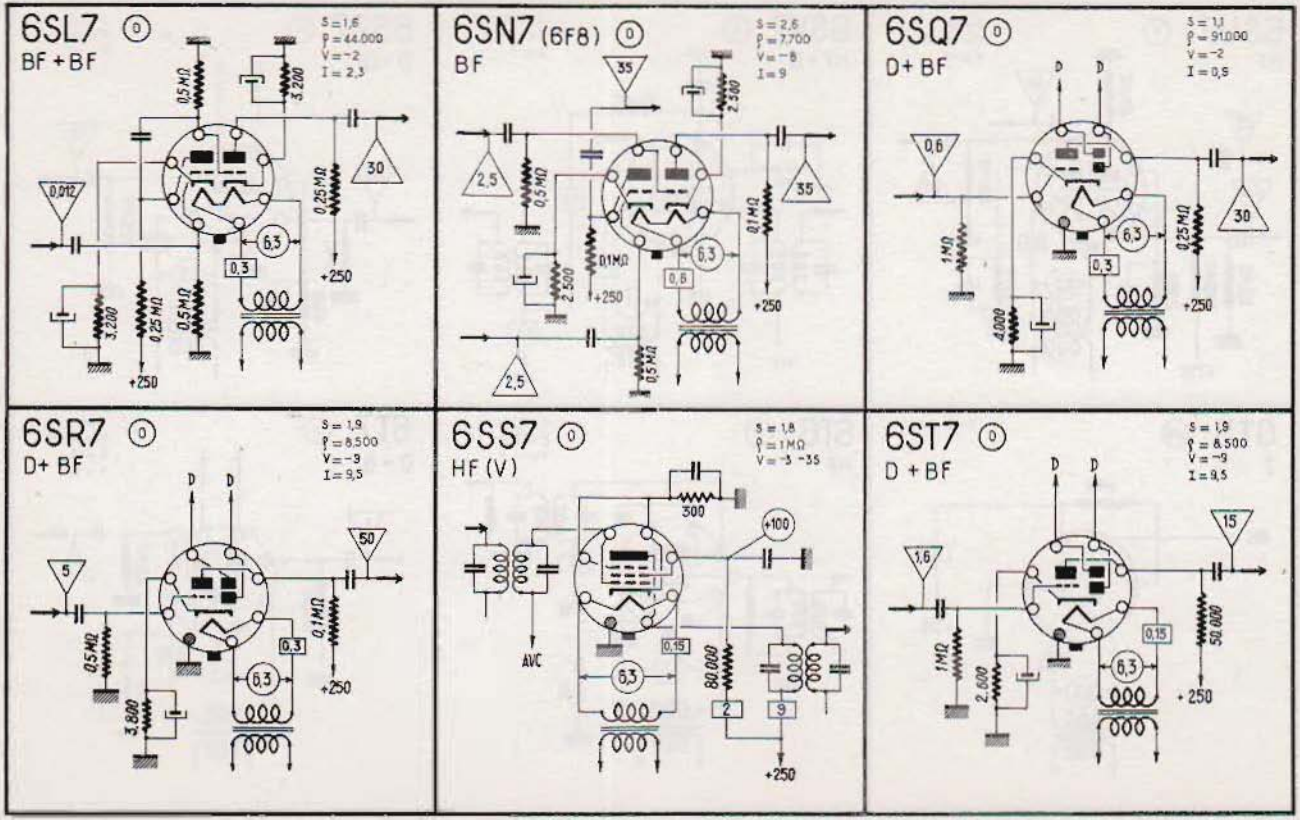


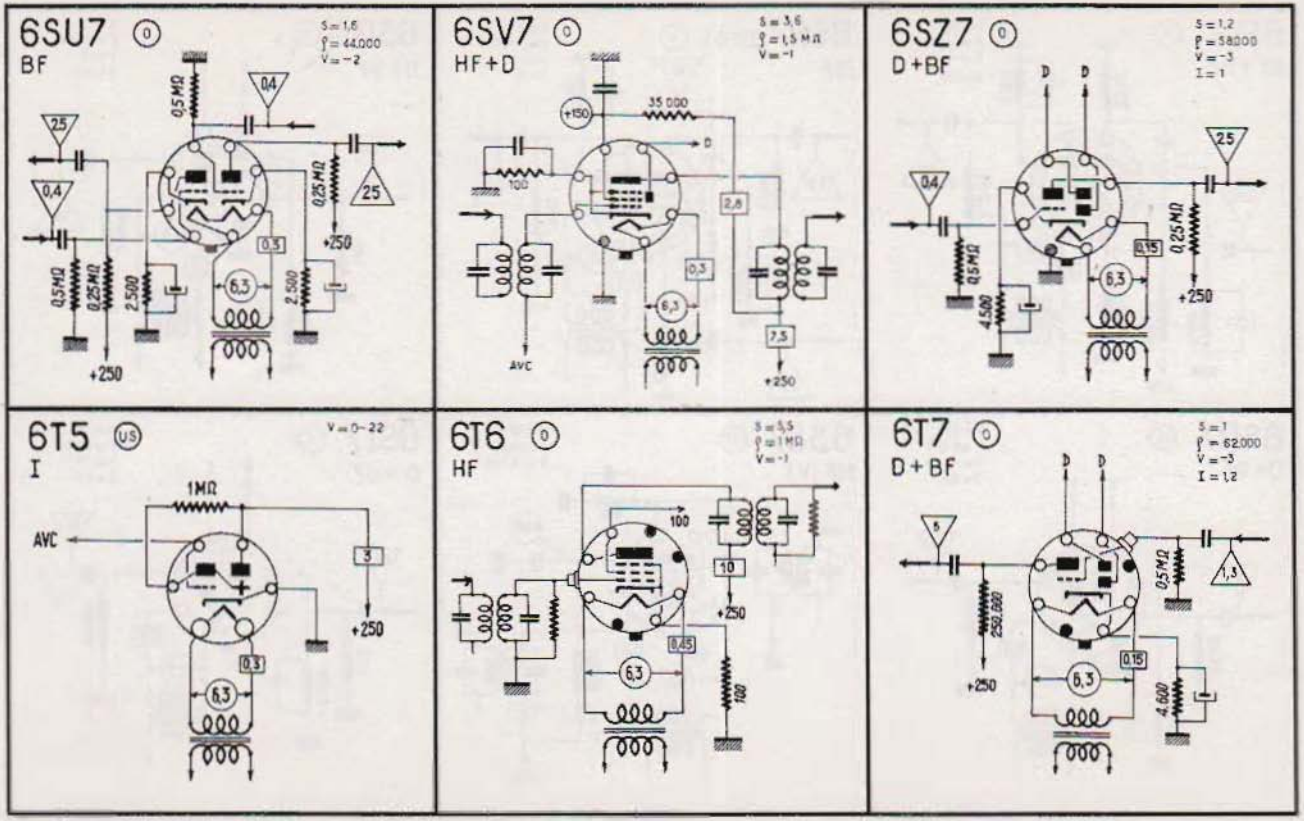
6SK7 ⓪

HF(V)

S = 2
P = 0,8 MΩ
V = -3 -35



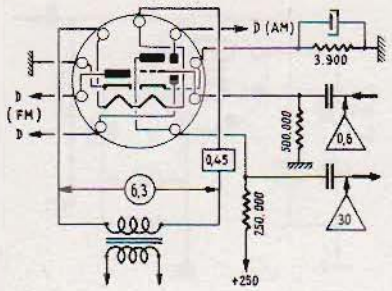

6SL7
BF + BF
S = 1,6
ρ = 44.000
V = −2
I = 2,3
0,5 MΩ
3.200
0,012
0,25 MΩ
0,5 MΩ
3.200
0,25 MΩ
+250
30
6,3
0,3
6SN7 (6F8)
BF
S = 2,5
ρ = 7.700
V = −8
I = 9
35
2.500
2,5
0,5 MΩ
0,1 MΩ
2.500
0,1 MΩ
+250
0,6
6,3
35
2,5
0,5 MΩ
6SQ7
D+ BF
S = 1,1
ρ = 91.000
V = −2
I = 0,5
D
D
0,6
1 MΩ
4.000
0,25 MΩ
+250
30
6,3
0,3
6SR7
D+ BF
S = 1,9
ρ = 8.500
V = −9
I = 9,5
D
D
5
0,5 MΩ
3.800
0,1 MΩ
+250
50
0,3
6,3
6SS7
HF (V)
S = 1,8
ρ = 1 MΩ
V = −3 −35
300
+100
AVC
0,15
6,3
80.000
2
9
+250
6ST7
D + BF
S = 1,9
ρ = 8.500
V = −9
I = 9,5
D
D
1,6
1 MΩ
2.000
15
50.000
0,15
6,3
+250


6SU7 ⓞ
BF
S = 1,6
ρ = 44.000
V = −2
0,5 MΩ
0,4
25
0,4
0,25 MΩ
25
0,5 MΩ
0,25 MΩ
2.500
2.500
+250
0,3
6,3
+250
6SV7 ⓞ
HF+D
S = 3,6
ρ = 1,5 MΩ
V = −1
+150
35.000
D
100
2,8
0,3
6,3
AVC
7,5
+250
6SZ7 ⓞ
D+BF
S = 1,2
ρ = 58000
V = −3
I = 1
D D
0,4
25
0,5 MΩ
4.500
0,15
6,3
0,25 MΩ
+250
6T5 Ⓤ
I
V = 0–22
1 MΩ
AVC
3
+250
0,3
6,3
6T6 ⓞ
HF
S = 5,5
ρ = 1 MΩ
V = −1
100
10
+250
0,45
6,3
100
6T7 ⓞ
D+BF
S = 1
ρ = 62.000
V = −3
I = 1,2
D D
5
250.000
+250
0,5 MΩ
1,3
0,15
6,3
4.000

6T8 (AM/FM) (N)

D + BF

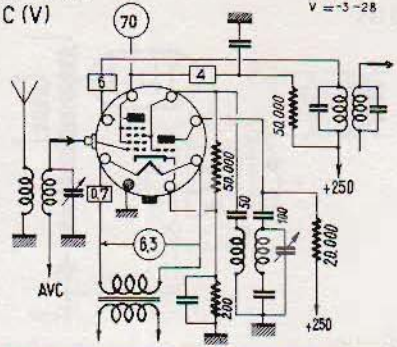
S = 1,2
P = 58.000
V = -3



6TH8 (O)

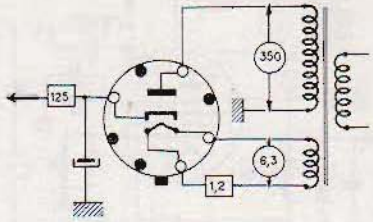
C (V)

S = 0,8
P = 1 MΩ
V = -3 -28



6U4 (O)

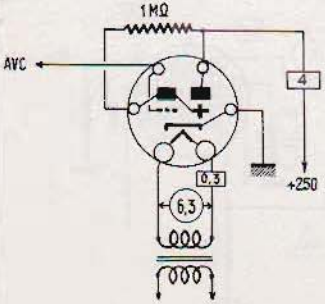
R



6U5/6G5 (US)

I

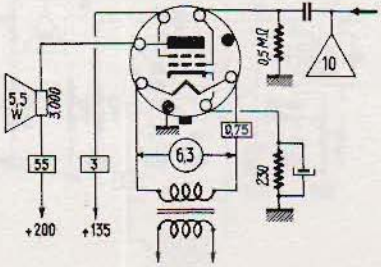
V = 0-22



6U6 (O)

P

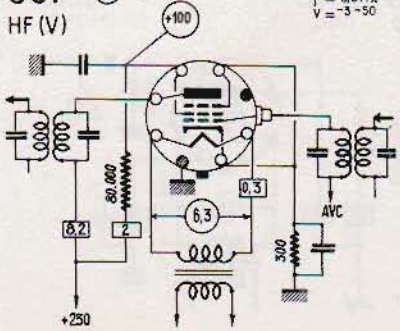
S = 6,2
P = 20000
V = -14



6U7 (O)

HF (V)

S = 1,6
P = 0,8 MΩ
V = -3 -50

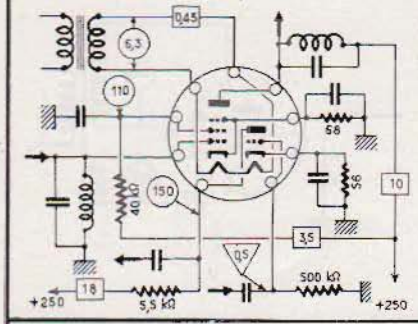


6U8 (N)

HF- BF(T)

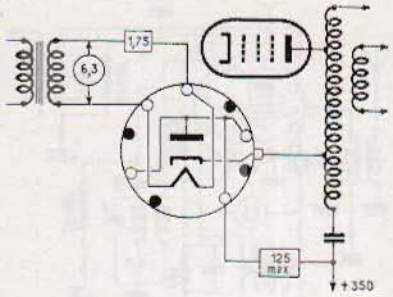
PENTHODE S = 5,2 mA/V, ρ = 400 kΩ

TRIODE S = 8,3 mA/V, ρ = 5 kΩ, μ = 40



6V3 (N)

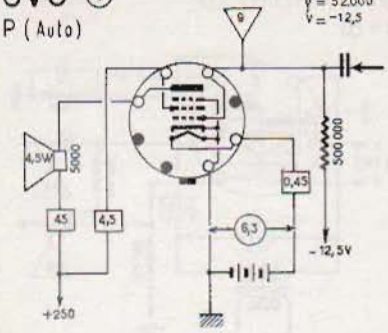
D(T)



6V5 (O)

P (Auto)

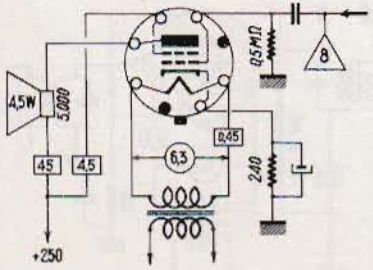
S = 4,1 mA/V, ρ = 52.000 Ω, V = -12,5



6V6 (O)

P

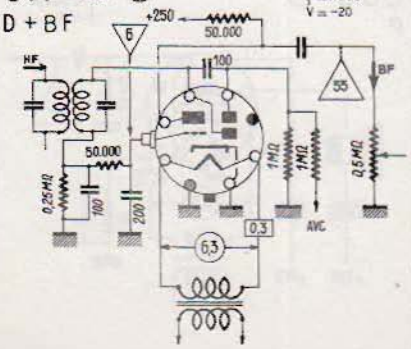
S = 4,1 mA/V, ρ = 52.000 Ω, V = -12,5



6V7=85 (O)

D + BF

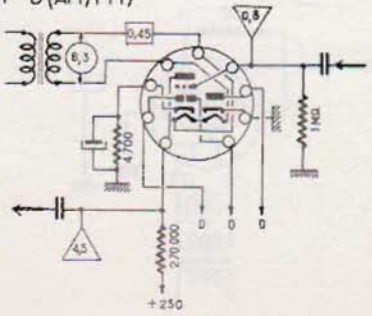
S = 1,1 mA/V, ρ = 7.500 Ω, V = -20



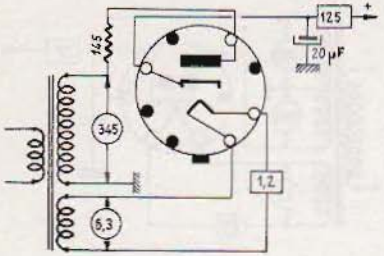
6V8 (N)

BF+D(AM/FM)

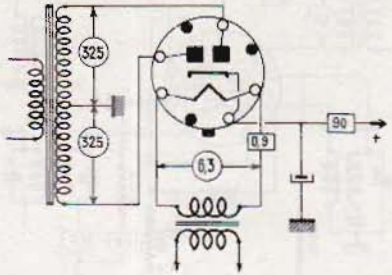
S = 12 mA/V, ρ = 58.000 Ω, V = -3



6W4 ⓪
R(T)

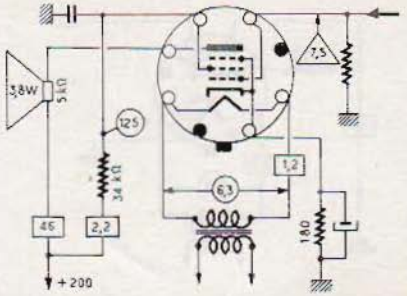


6W5 ⓪
R



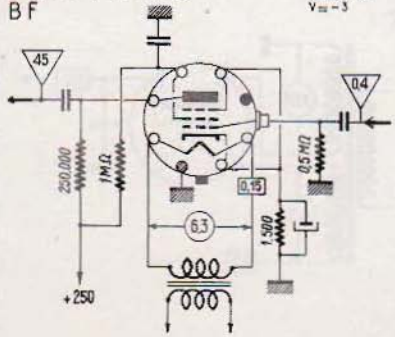
6W6 ⓪
P(T)

S = 8
ρ = 2,8 kΩ
V = −7,5

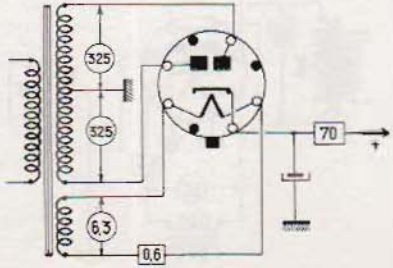


6W7 (6J7) ⓪
BF

S = 1,22
ρ = 1,5 MΩ
V = −3



6X5 ⓪
R

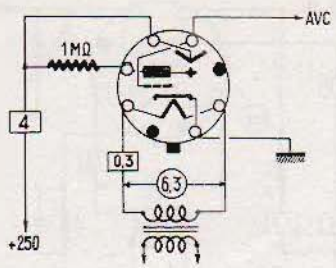


6X2 = EY51
6X4 = EZ90
7AN7 = PCC84

6X6 (6E5) ⓪

I

V = 0 −8

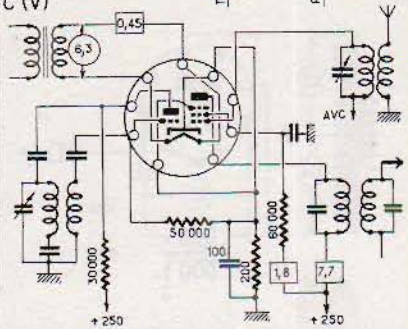


6X8 Ⓝ

C (V)

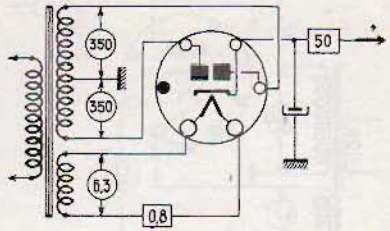
TRIODE S = 58 P = 6000 V = −3

PENTHODE S = 4,6 P = 0,75MΩ V = −3



6Y5 (US)

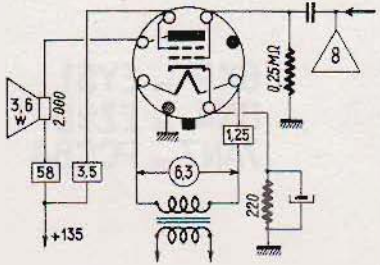
R



6Y6 ⓪

P

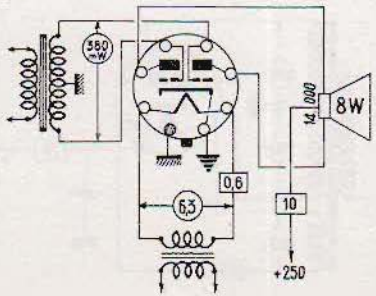
S = 7
P = 9 300
V = −13,5



6Y7 (79) ⓪

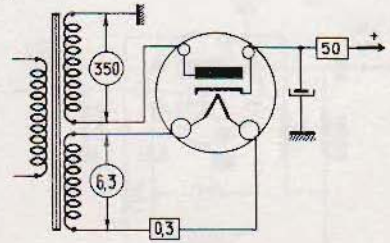
P (Cl.B)

V = 0



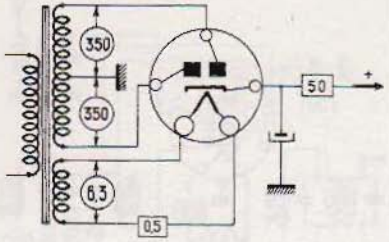
6Z3 (US)

R



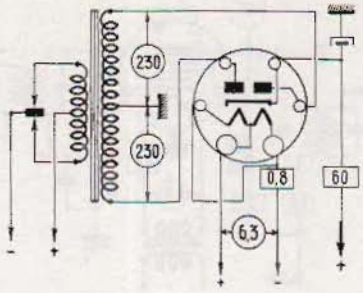
6Z4 (US)

R



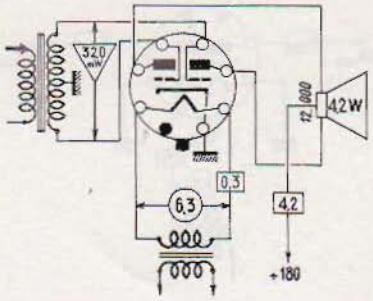
6Z5 (US)

R



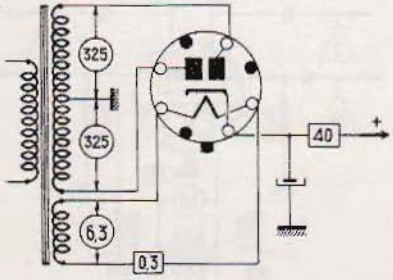
6Z7 (D)

P(Cl.B)



6ZY5 (D)

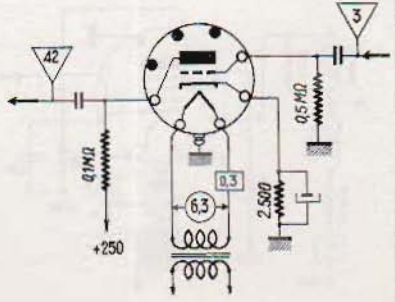
R



7A4 (6J5) (L)

BF

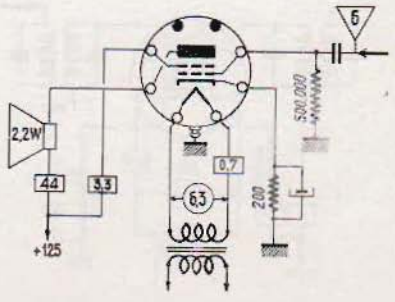
S = 2,6
ρ = 7700
V = -8
I = 9



7A5 (L)

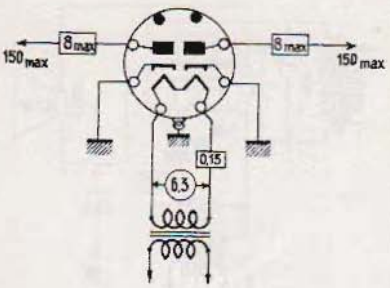
P

S = 5
ρ = 17,000
V = -9



7A6 (6H6) L

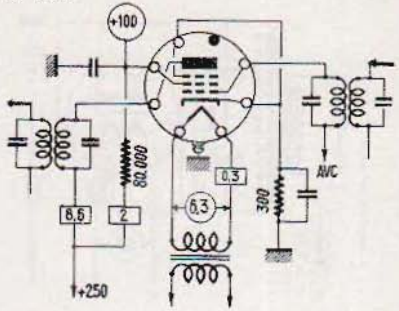
D



7A7 (6SK7) L

HF (V)

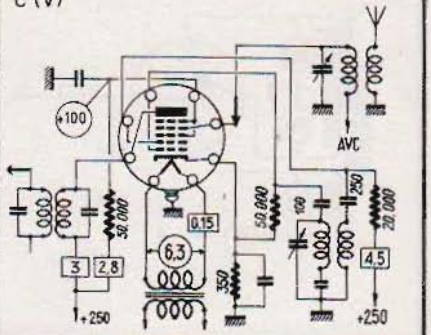
S = 2
ρ = 0,8 MΩ
V = -3 -35



7A8 (6A8) L

C (V)

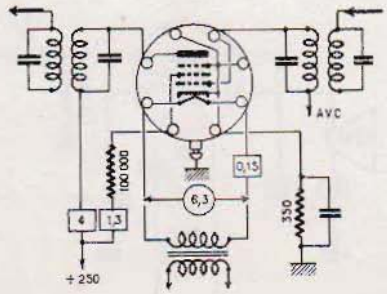
S = 0,6
ρ = 0,7
V = -3 -30



7AB7 L

HF

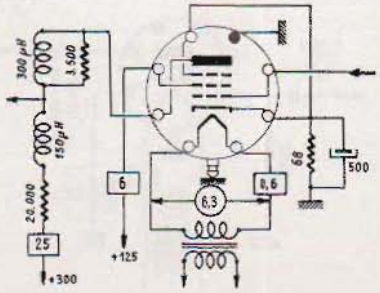
S = 1,6
ρ = 0,5 MΩ
V = -2 -18



7AD7 L

HF (T)

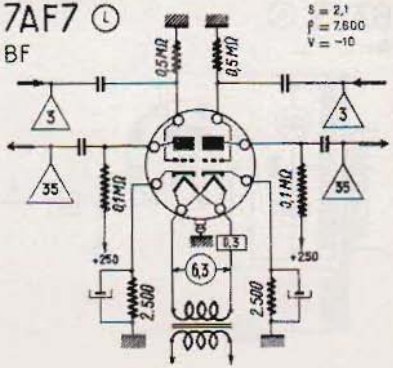
S = 9,5
ρ = 0,3 MΩ
V = -3



7AF7 L

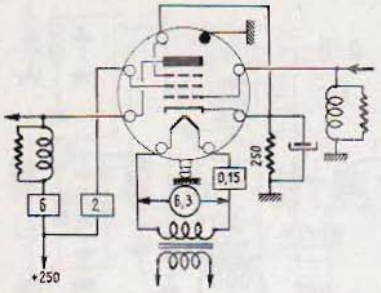
BF

S = 2,1
ρ = 7.600
V = -10



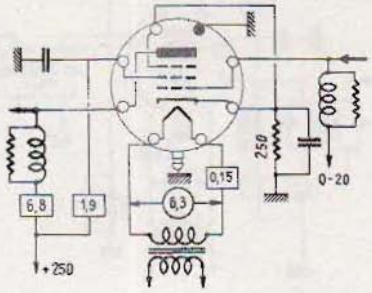
7AG7 Ⓛ
HF (T)

S = 4,2
ρ = > 1MΩ
V = -2



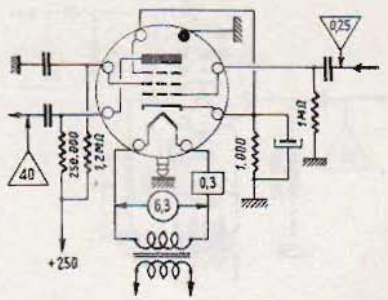
7AH7 Ⓛ
HF (T)

S = 3,3
ρ = 1MΩ
V = -2 -20



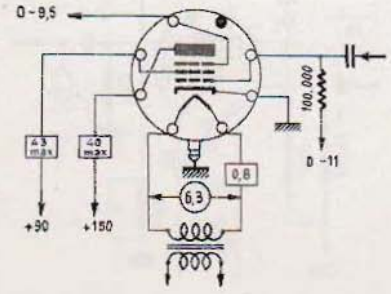
7AJ7 (6SJ7) Ⓛ
BF

S = 1,57
ρ = 1MΩ
V = -3



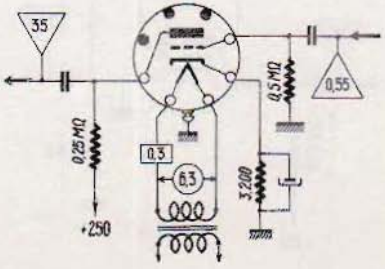
7AK7 Ⓛ
HF (T)

S = 6,5
ρ = 11.500
V = 0-11



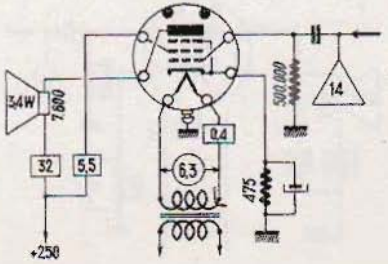
7B4 (6SF5) Ⓛ
BF

S = 1,5
ρ = 66.000
V = -2



7B5 (6K6) Ⓛ
P

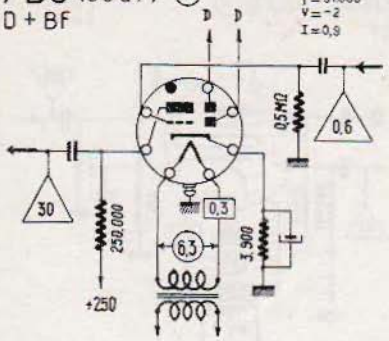
S = 2,3
ρ = 68.000
V = -18



7B6 (6SQ7) L

D + BF

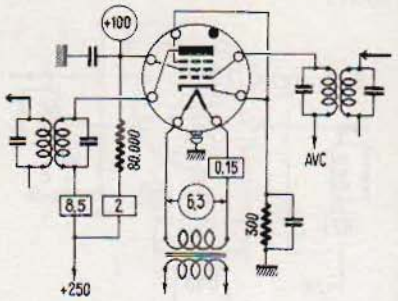
S = 1,1
P = 91.000
V = -2
I = 0,9



7B7 L

HF (V)

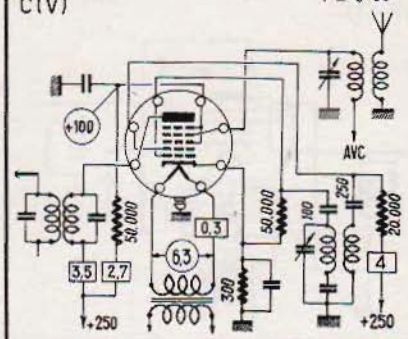
S = 1,7
P = 0,75 MΩ
V = -3-40



7B8 L

C(V)

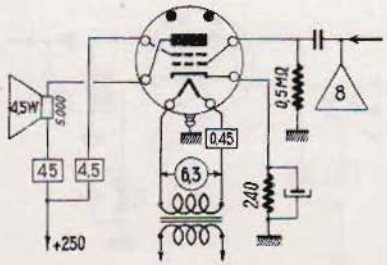
S = 0,55
P = 0,36 MΩ
V = -3-35



7C5 (6V6) L

P

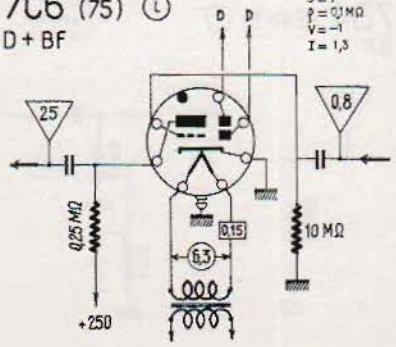
S = 4,1
P = 52.000
V = -12,5



7C6 (75) L

D + BF

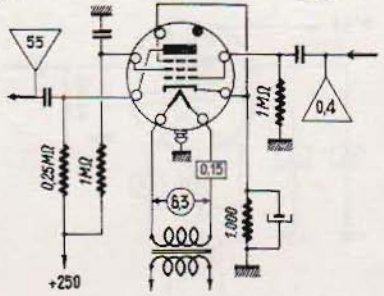
S = 1
P = 0,1 MΩ
V = -1
I = 1,3

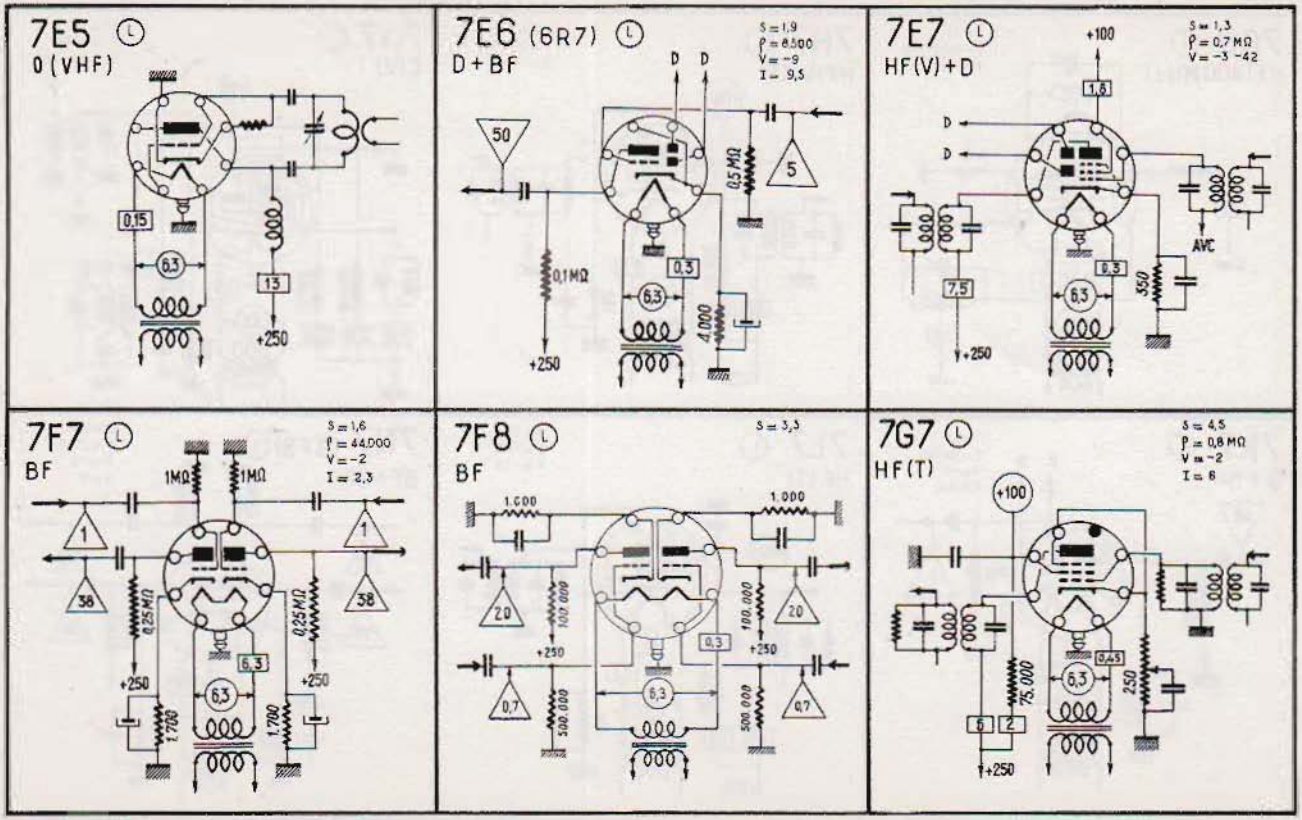


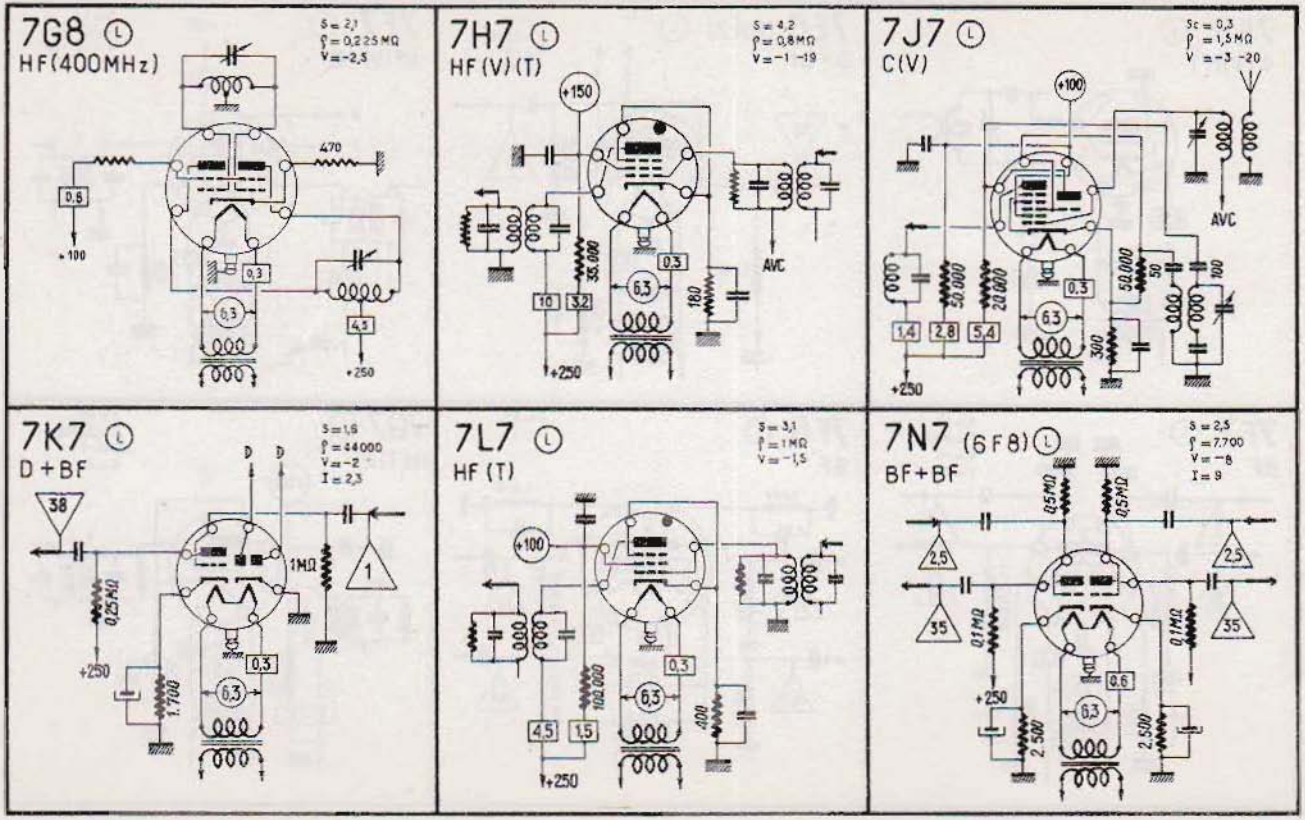
7C7 (6J7) L

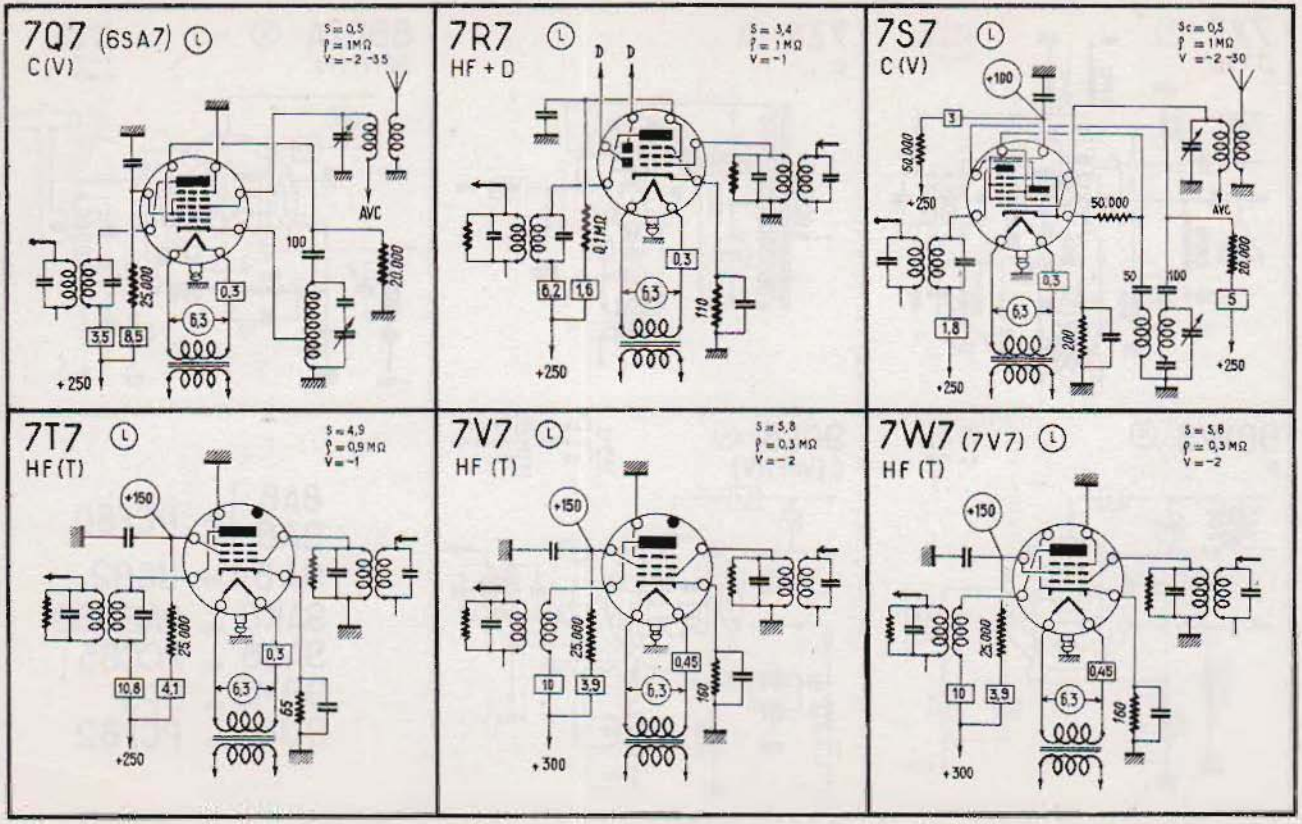
BF

S = 1,3
P = 2 MΩ
V = -3
I = 2

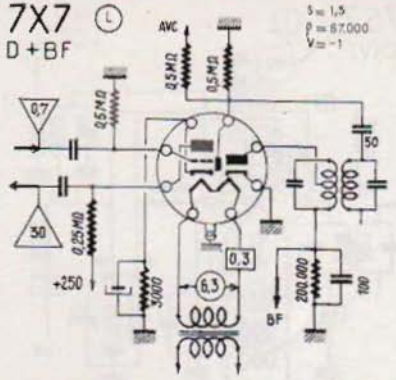



7E5
0 (VHF)
0,15
6,3
13
+250
7E6 (6R7)
D+BF
S = 1,9
ρ = 0,500
V = -9
I = 9,5
D D
50
5
0,5 MΩ
0,1 MΩ
0,3
6,3
4.000
+250
7E7
HF(V)+D
+100
S = 1,3
ρ = 0,7 MΩ
V = -3 -42
1,6
D
D
AVC
0,3
7,5
6,3
350
+250
7F7
BF
S = 1,6
ρ = 44.000
V = -2
I = 2,3
1MΩ
1MΩ
1
1
38
38
0,25 MΩ
0,25 MΩ
+250
+250
6,3
1.700
1.700
7F8
BF
S = 3,3
1.000
1.000
2,0
2,0
100.000
100.000
+250
+250
0,3
6,3
0,7
0,7
500.000
500.000
7G7
HF(T)
+100
S = 4,5
ρ = 0,8 MΩ
V = -2
I = 8
0,45
6,3
75.000
250
5
2
+250

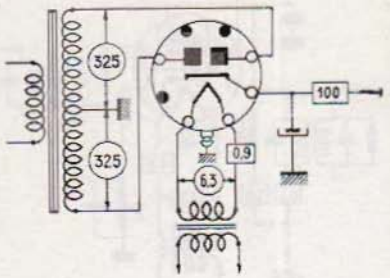

7G8 L
HF(400MHz)
S = 2,1
ρ = 0,225 MΩ
V = -2,5
470
0,6
+100
0,3
6,3
4,5
+250
7H7 L
HF (V) (T)
S = 4,2
ρ = 0,8 MΩ
V = -1 -19
+150
35.000
0,3
6,3
10
3,2
160
AVC
+250
7J7 L
C(V)
Sc = 0,3
ρ = 1,5 MΩ
V = -3 -20
+100
AVC
50.000
20.000
0,3
6,3
50.000
50
100
1,4
2,8
5,4
300
+250
7K7 L
D + BF
S = 1,6
ρ = 4000
V = -2
I = 2,3
D
D
38
1 MΩ
1
0,25 MΩ
+250
1.700
0,3
6,3
7L7 L
HF (T)
S = 3,1
ρ = 1 MΩ
V = -1,5
+100
0,3
6,3
102.000
4,5
1,5
400
+250
7N7 (6F8) L
BF + BF
S = 2,5
ρ = 7.700
V = -8
I = 9
0,5 MΩ
0,5 MΩ
2,5
2,5
35
35
0,1 MΩ
0,1 MΩ
0,6
+250
2.500
6,3
2.500


7Q7 (6SA7) L
C(V)
S = 0,5
ρ = 1 MΩ
V = -2 -35
AVC
100
25.000
20.000
0,3
6,3
3,5
8,5
+250
7R7 L
HF + D
S = 3,4
ρ = 1 MΩ
V = -1
D
D
0,1 MΩ
0,3
6,2
1,6
6,3
110
+250
7S7 L
C(V)
S = 0,5
ρ = 1 MΩ
V = -2 -30
+100
3
50.000
+250
50.000
AVC
0,3
6,3
50
100
200
20.000
1,8
5
+250
7T7 L
HF (T)
S = 4,9
ρ = 0,9 MΩ
V = -1
+150
25.000
0,3
10,8
4,1
6,3
65
+250
7V7 L
HF (T)
S = 5,8
ρ = 0,3 MΩ
V = -2
+150
25.000
0,45
10
3,9
6,3
160
+300
7W7 (7V7) L
HF (T)
S = 5,8
ρ = 0,3 MΩ
V = -2
+150
25.000
0,45
10
3,9
6,3
160
+300

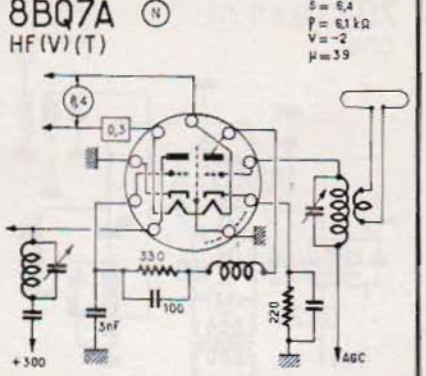
7X7 Ⓛ
D+BF



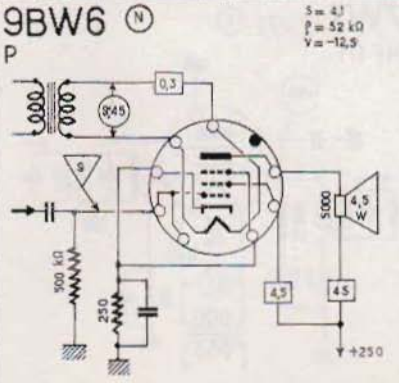
7Z4 Ⓛ
R



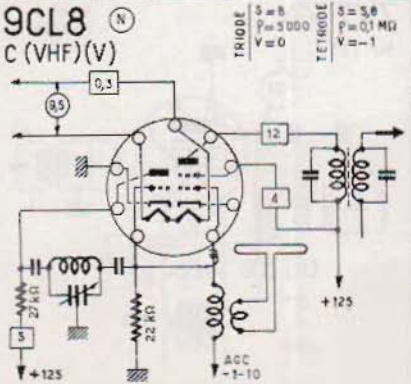
8BQ7A Ⓝ
HF(V)(T)



9BW6 Ⓝ
P



9CL8 Ⓝ
C (VHF)(V)

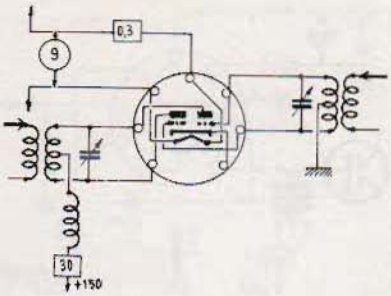


8A8 }
9A8 } = PCF80
9AB4 = UC92
9AK8 = PABC80
9AQ8 = PCC85
9BM5 = 9P9
9U8 = PCF82

9J6 (M)

HF (T)

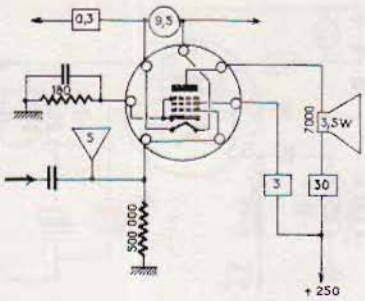
S = 5,3
ρ = 7,100
V = -10



9P9/9BM5 (M)

P

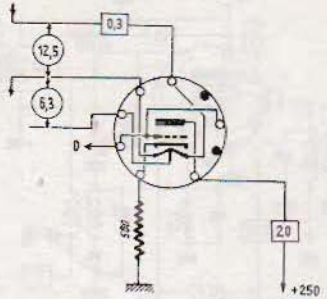
S = 7
ρ = 60000
V = -6



12A4 (N)

BF (T)

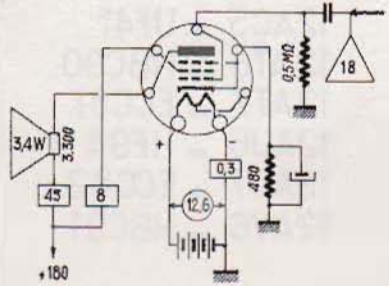
S = 7,8
ρ = 2.550
V = -9



12A5 (US)

P

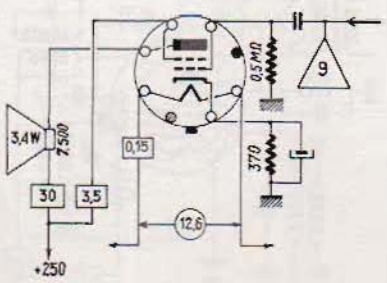
S = 2,4
ρ = 35.000
V = -2,5



12A6 (O)

P

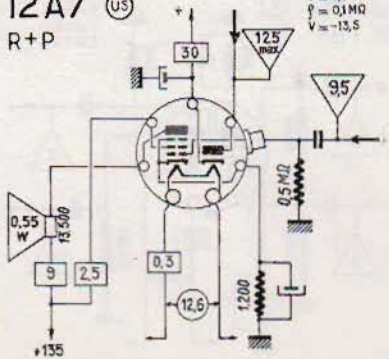
S = 3
ρ = 70.000
V = -12,5



12A7 (US)

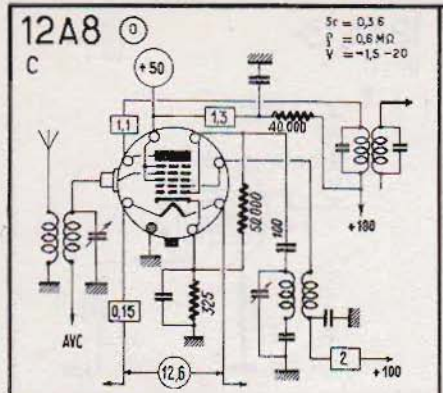
R+P

S = 0,9
ρ = 0,1 MΩ
V = -13,5



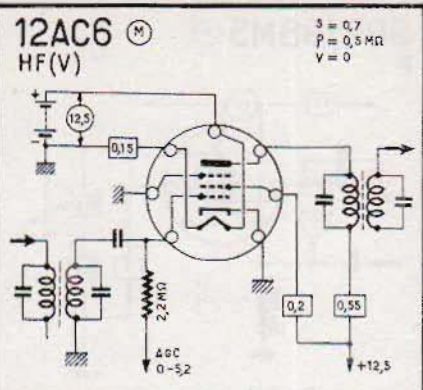
12A8 (O)

C



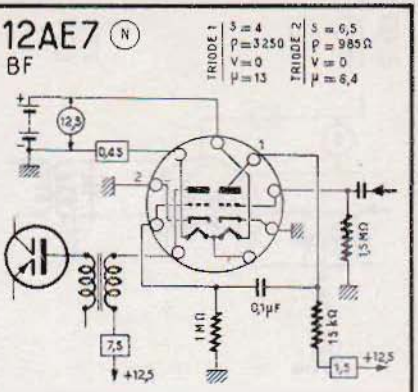
12AC6 (M)

HF(V)



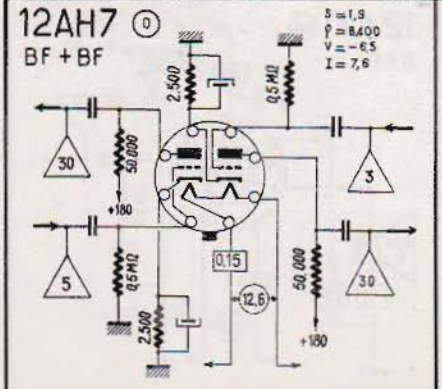
12AE7 (N)

BF



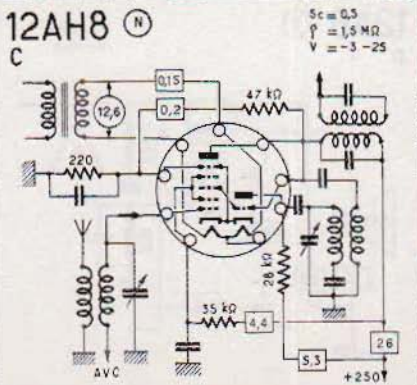
12AH7 (O)

BF + BF



12AH8 (N)

C

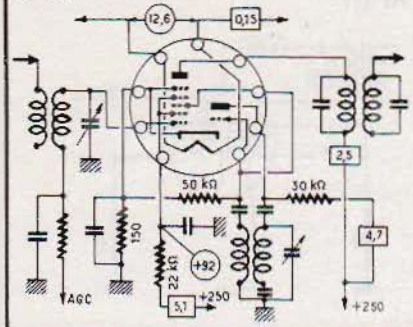


12AC5 = UF41
12AT6 = HBC90
12AT7 = ECC81
12AU6 = HF94
12AU7 = ECC82
12AV6 = HBC91

12AJ8 (N)

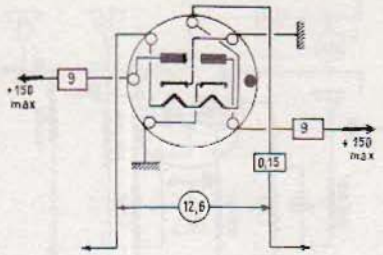
C (V)

Sc = 0,7
ρ = 1 MΩ
V = −2 −28,5



12AL5 (6AL5) (M)

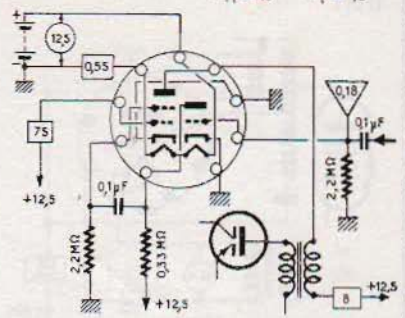
D



12AL8 (N)

BF

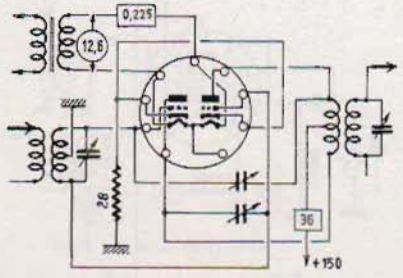
TRIODE: S = 11 ρ = 13000 V = 0,9 μ = 13
TETRODE: S = 15 ρ = 460 Ω V = 0,5 μ = 7,2



12AV7 (N)

HF (T)

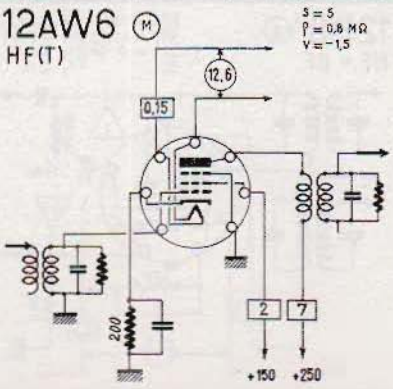
S = 8,5
ρ = 4,800
V = −1



12AW6 (M)

HF (T)

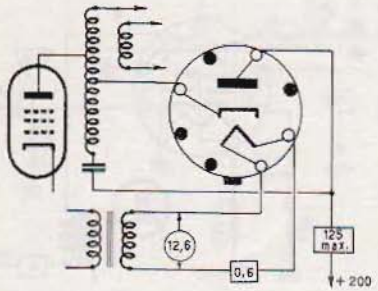
S = 5
ρ = 0,8 MΩ
V = −1,5



12AJ7 = HCH81
12AQ5 = 6AQ5 (12V)
12AY6 = 12AT6
12AX7 = ECC83
12BA6 = HF93
12BE6 = HK90
12D8 = HCH81
12S7 = UAF42

12AX4 (D)

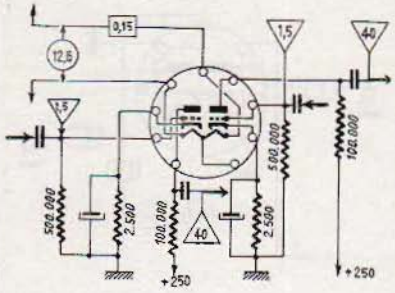
D (T)



12AY7 (N)

BF

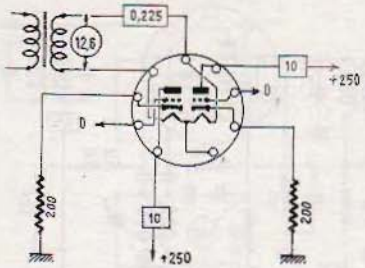
S = 1,75
ρ = 43.000
V = -4



12AZ7 (N)

HF (T)

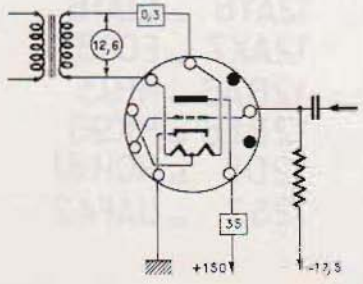
S = 5,5
ρ = 10.900
V = -2



12B4 (N)

BF (T)

S = 6,5
V = -17,5 kΩ
μ = 6,5

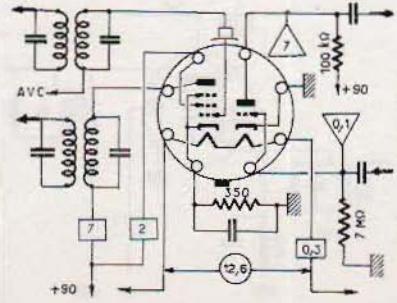


12B8 (D)

HF + BF

PENTHODE
S = 1,8
ρ = 200 kΩ
V = -3 -35

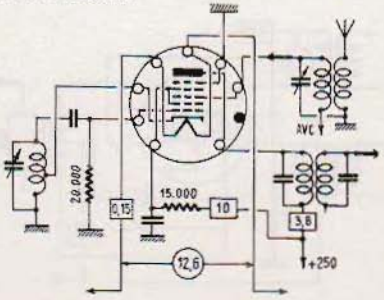
TRIODE
S = 2,4
ρ = 37 kΩ
V = 0
μ = 90



12BA7 (N)

C (V) 100MHz

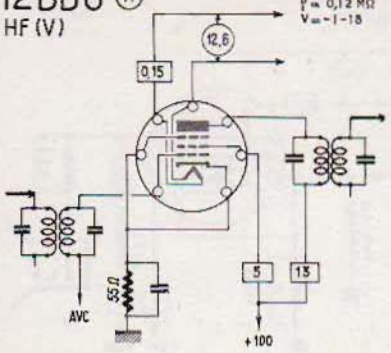
Sc = 0,95
ρ = 1 MΩ
V = 0-20



12BD6 (M)

HF (V)

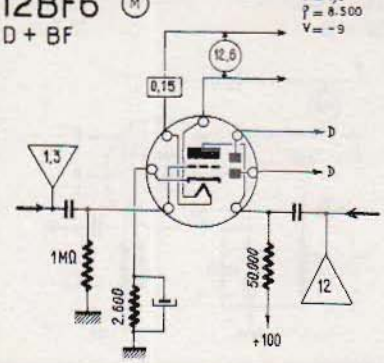
S = 2,3
P = 0,12 MΩ
V = -1-18



12BF6 (M)

D + BF

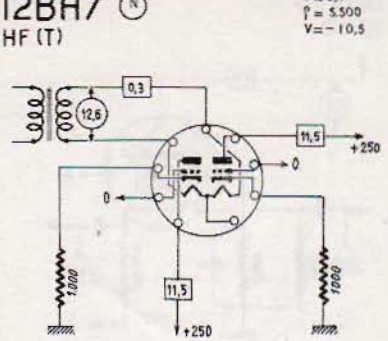
S = 1,9
P = 8.500
V = -9



12BH7 (N)

HF (T)

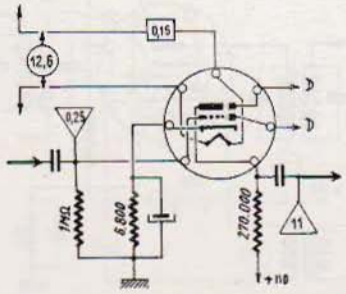
S = 3,1
P = 5.500
V = -10,5



12BK6 (M)

BF + D

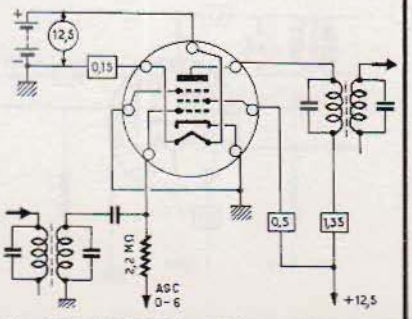
S = 1,6
P = 62.000
V = -2



12BL6 (M)

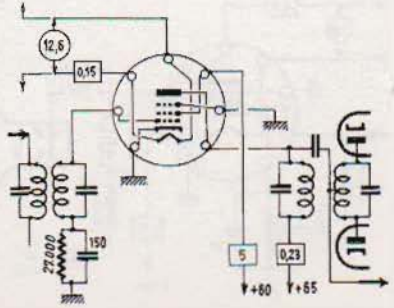
HF (V)

S = 1,35
P = 0,5 MΩ
V = -0,65



12BN6 (M)

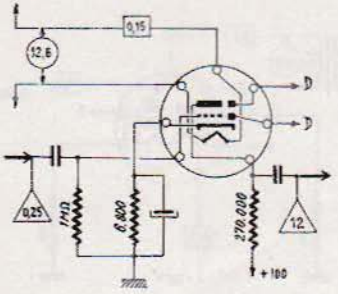
HF (FM) (LIMIT.)



12BT6 (M)

BF + D

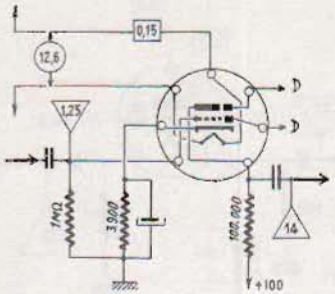
S = 1,3
ρ = 54.000
V = −1



12BU6 (M)

BF + D

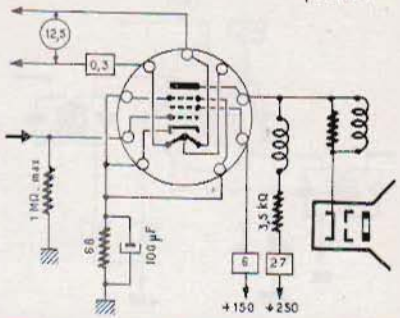
S = 1,9
ρ = 8.500
V = −9



12BV7 (N)

VF (T)

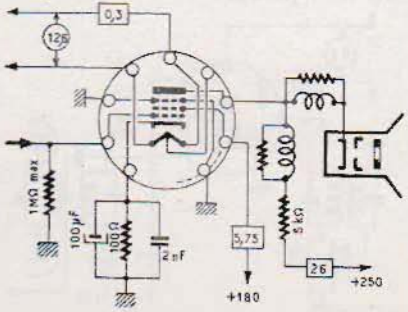
S = 13
ρ = 85.000
V = −2,2
μ = 1.000



12BY7 (N)

VF (T)

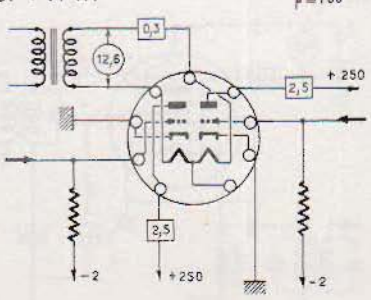
S = 11
ρ = 93 kΩ
V = −3



12BZ7 (N)

BF + VF (T)

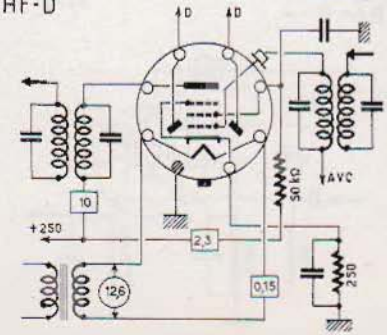
S = 3,2
ρ = 31,8 kΩ
V = −2
μ = 100

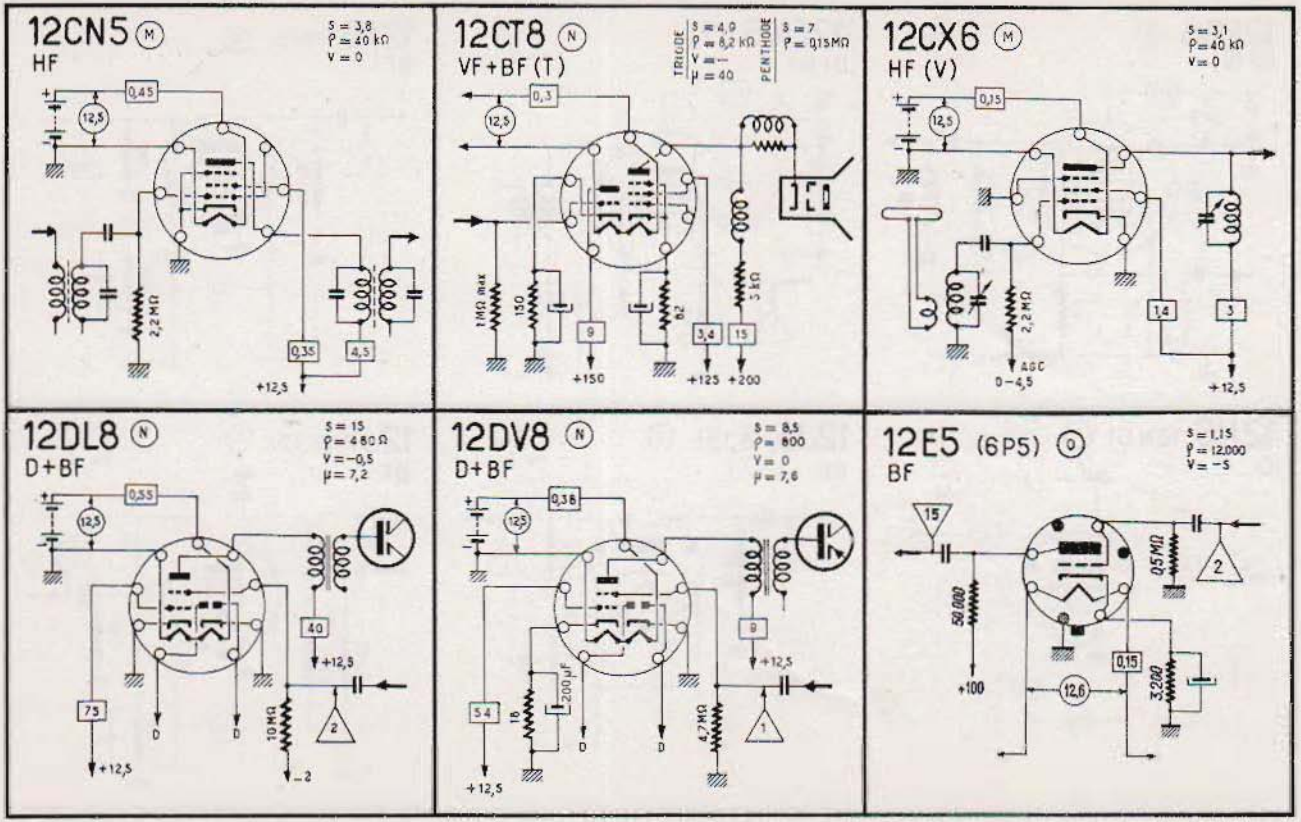


12C8 (O)

HF-D

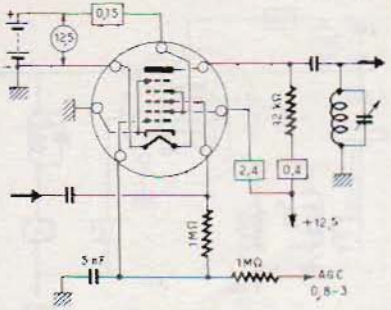
S = 1,325
ρ = 600 kΩ
V = −3 −20




12CN5 (M)
HF
S = 3,8
ρ = 40 kΩ
V = 0
0,45
12,5
2,2 MΩ
0,35
4,5
+12,5
12CT8 (N)
VF+BF (T)
TRIODE
S = 4,9
ρ = 8,2 kΩ
V = 1
μ = 40
PENTHODE
S = 7
ρ = 0,15 MΩ
0,3
12,5
1 MΩ max
150
9
6,2
3,4
15
3 kΩ
+150
+125
+200
12CX6 (M)
HF (V)
S = 3,1
ρ = 40 kΩ
V = 0
0,15
12,5
2,2 MΩ
AGC
0–4,5
1,4
3
+12,5
12DL8 (N)
D+BF
S = 15
ρ = 480 Ω
V = −0,5
μ = 7,2
0,55
12,5
40
+12,5
75
D
D
10 MΩ
2
+12,5
−2
12DV8 (N)
D+BF
S = 8,5
ρ = 800
V = 0
μ = 7,6
0,36
12,5
9
+12,5
54
16
200 μF
D
D
4,7 MΩ
1
+12,5
12E5 (6P5) (O)
BF
S = 1,15
ρ = 12.000
V = −5
15
50.000
+100
0,5 MΩ
2
0,15
12,6
3.200

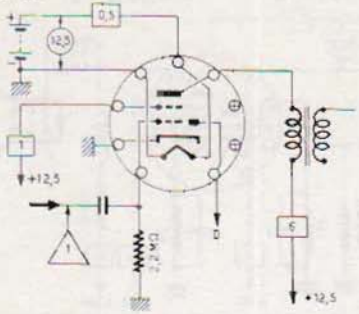
12EG6 (M)
HF (V)

S = 0,8
ρ = 0,15 MΩ
V = −0,8



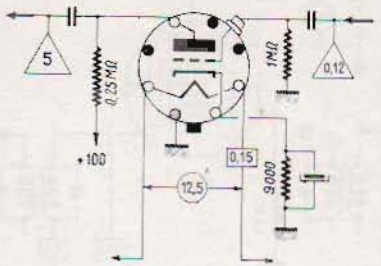
12EM6 (N)
D+BF

S = 4
ρ = 4 kΩ
V = 0

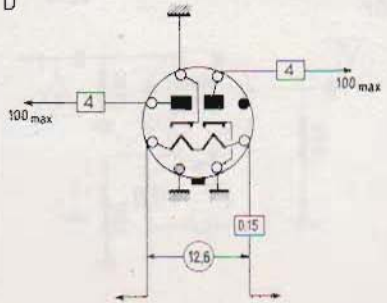


12F5 (6F5) (O)
BF

S = 1,5
ρ = 60000
V = −2

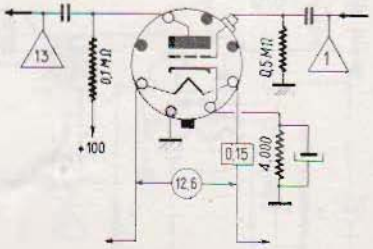


12H6 (6H6) (O)
D



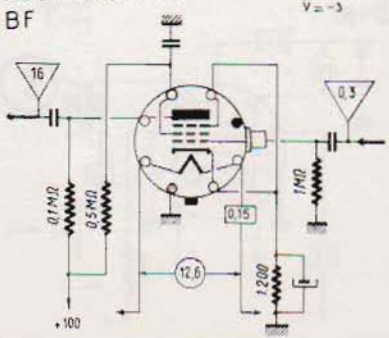
12J5 (6J5) (O)
BF

S = 3
ρ = 6700
V = −3



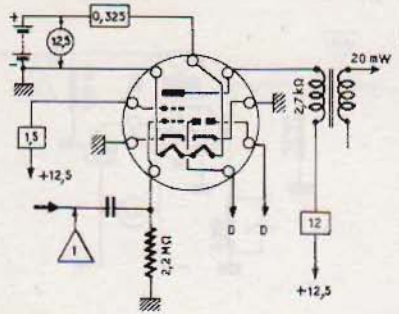
12J7 (6J7) (O)
BF

S = 1,18
ρ = 1 MΩ
V = −3



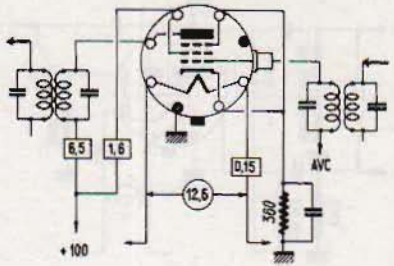
12J8 (N)
D+BF

S = 3,5
P = 6.000
V = 0



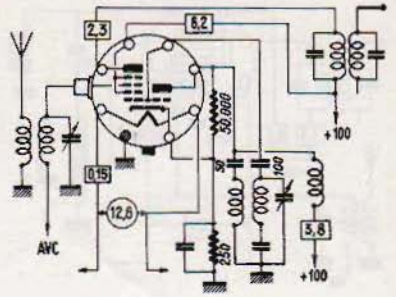
12K7 (6K7) (O)
HF (V)

S = 1,32
P = 0,25 MΩ
V = −3 −38,5



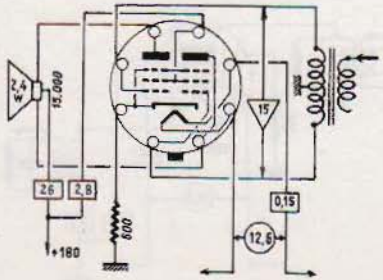
12K8 (6K8) (O)
C (V)

Sc = 0,325
P = 0,4 MΩ
V = −3 −30



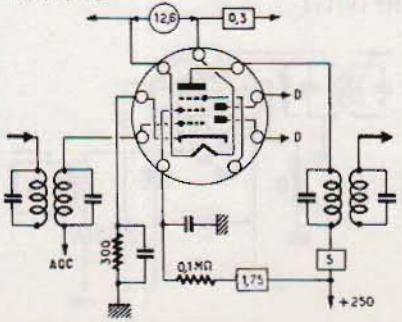
12L8 (O)
P (Cl. AB)

V = −9



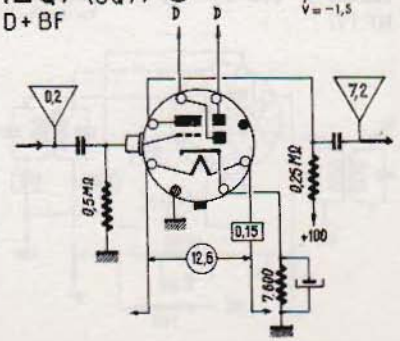
12N8 (N)
HF (V) + D

S = 2,2
P = 1,5 MΩ
V = −2 −35



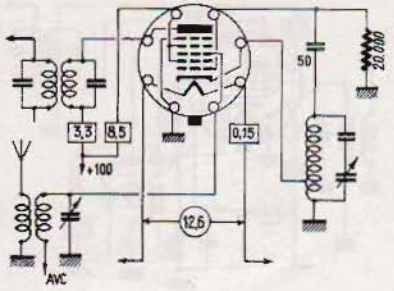
12Q7 (6Q7) (O)
D+BF

S = 0,8
P = 87.500
V = −1,5



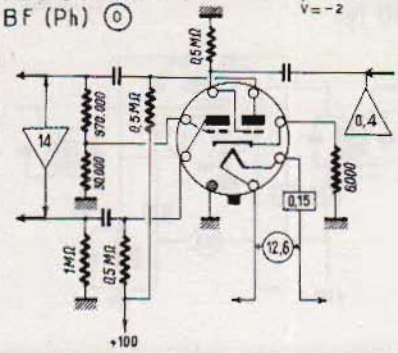
12SA7 (6SA7) ⓪
C (V)

Sc = 0,425
ρ = 0,5 MΩ
V = 0,35



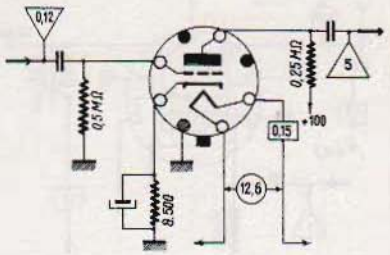
12SC7 (6SC7)
BF (Ph) ⓪

S = 1,32
ρ = 53.000
V = −2



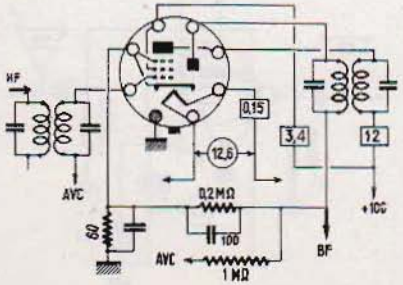
12SF5 (6SF5) ⓪
BF

S = 1,5
ρ = 66.000
V = −2



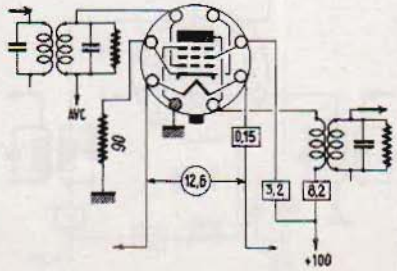
12SF7 (6SF7) ⓪
HF (V)

S = 1,9
ρ = 0,2 MΩ
V = −1 −35



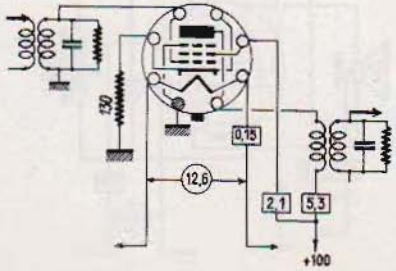
12SG7 (6SG7) ⓪
HF (V)(T)

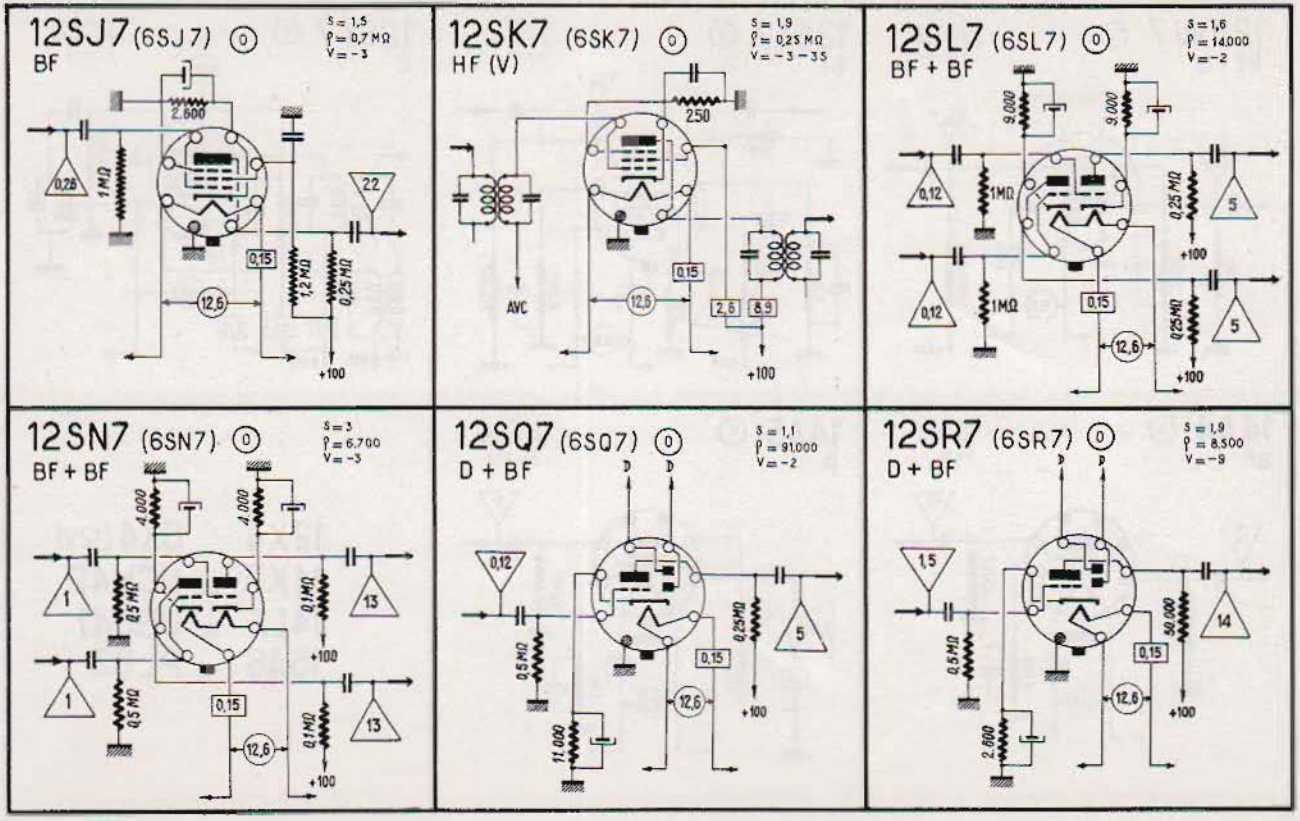
S = 4,1
ρ = 0,25 MΩ
V = −1



12SH7 ⓪
HF (T)

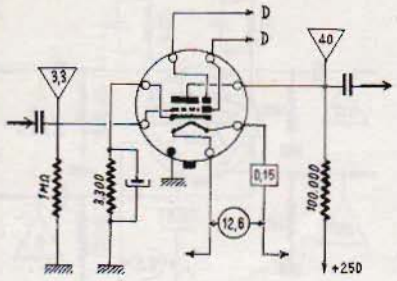
S = 4
ρ = 0,35 MΩ
V = −1




12SJ7 (6SJ7) ⓪
BF
S = 1,5
ρ = 0,7 MΩ
V = −3
2.600
0,28
1 MΩ
22
0,15
2,2 MΩ
0,25 MΩ
12,6
+100
12SK7 (6SK7) ⓪
HF (V)
S = 1,9
ρ = 0,25 MΩ
V = −3 −35
250
AVC
0,15
12,6
2,6
8,9
+100
12SL7 (6SL7) ⓪
BF + BF
S = 1,6
ρ = 14.000
V = −2
9.000
9.000
0,12
1 MΩ
0,25 MΩ
5
+100
0,12
1 MΩ
0,15
0,25 MΩ
5
12,6
+100
12SN7 (6SN7) ⓪
BF + BF
S = 3
ρ = 6.700
V = −3
4.000
4.000
1
0,5 MΩ
0,1 MΩ
13
+100
1
0,5 MΩ
0,15
0,1 MΩ
13
12,6
+100
12SQ7 (6SQ7) ⓪
D + BF
S = 1,1
ρ = 91.000
V = −2
D
D
0,12
0,5 MΩ
0,25 MΩ
5
0,15
12,6
+100
11.000
12SR7 (6SR7) ⓪
D + BF
S = 1,9
ρ = 8.500
V = −9
D
D
1,5
0,5 MΩ
50.000
14
0,15
12,6
+100
2.600

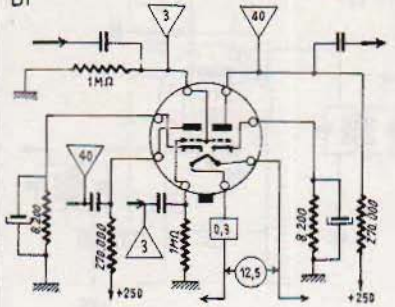
12SW7 ⓞ
BF+D

S = 1,9
ρ = 8.500
V = −9



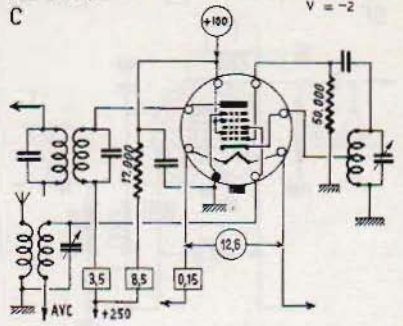
12SX7 ⓞ
BF

S = 2,5
ρ = 7.700
V = −8



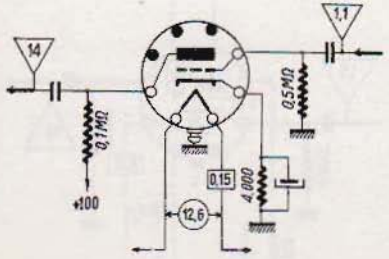
12SY7 ⓞ
C

S t = 0,45
ρ = 1MΩ
V = −2



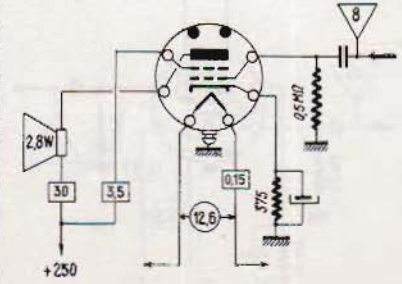
14A4 Ⓛ
BF

S = 3
ρ = 6.700
V = 0

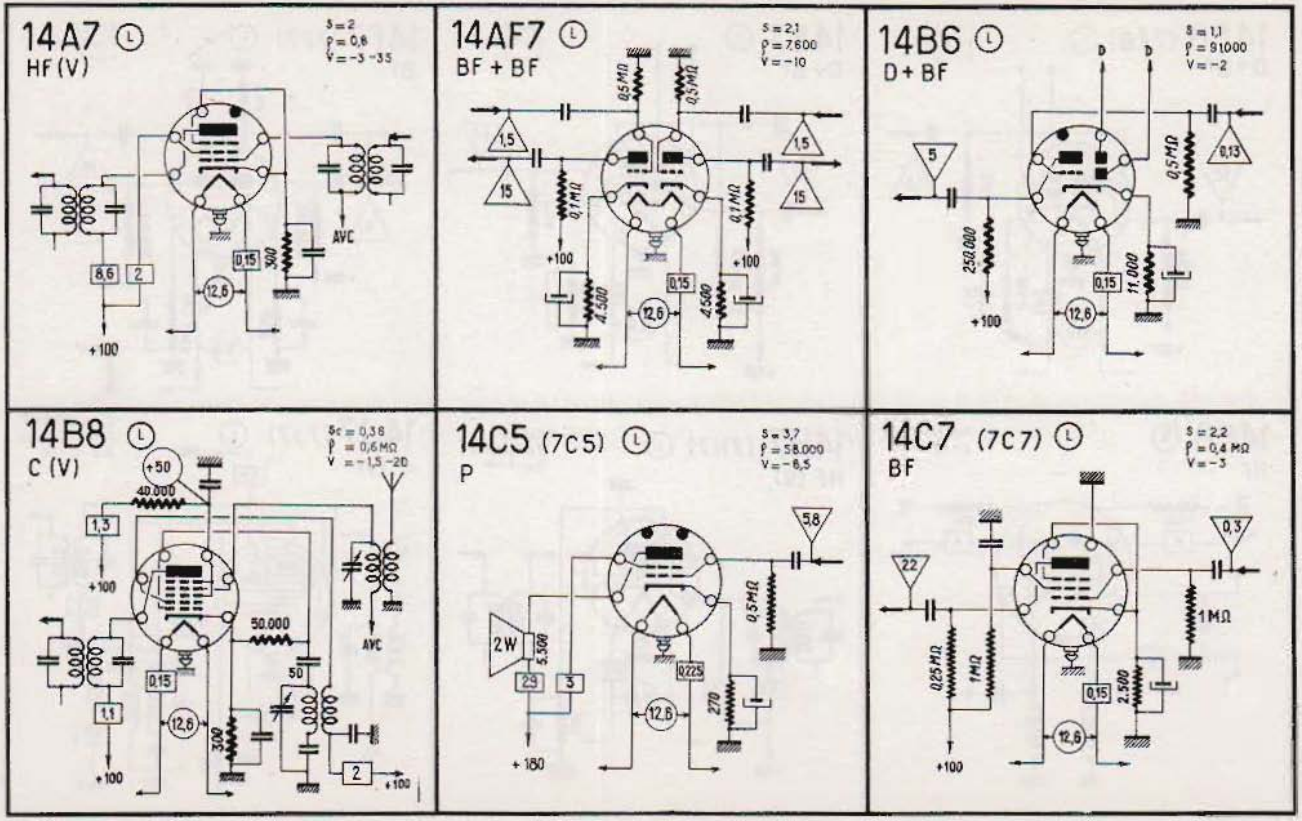


14A5 Ⓛ
P

S = 3
ρ = 70.000
V = −12,5

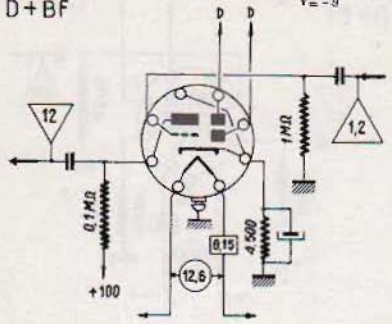


12X4 6X4 (12V)
14K7 = UCH42
14L7 = UBC41
15A6 = PL83


14A7 L
HF (V)
S = 2
ρ = 0,8
V = -3 -35
AVC
8,6
2
0,15
300
12,6
+100
14AF7 L
BF + BF
S = 2,1
ρ = 7.600
V = -10
0,5 MΩ
0,5 MΩ
1,5
1,5
15
15
0,1 MΩ
0,1 MΩ
+100
+100
4.500
4.500
0,15
12,6
14B6 L
D + BF
S = 1,1
ρ = 91000
V = -2
D
D
5
0,13
0,5 MΩ
250.000
11.000
0,15
12,6
+100
14B8 L
C (V)
Sc = 0,38
ρ = 0,6 MΩ
V = -1,5 -20
+50
40.000
1,3
+100
50.000
AVC
50
0,15
1,1
12,6
300
2
+100
14C5 (7C5) L
P
S = 3,7
ρ = 58.000
V = -8,5
5,8
0,5 MΩ
2W
5.500
2,9
3
0,225
270
12,6
+180
14C7 (7C7) L
BF
S = 2,2
ρ = 0,4 MΩ
V = -3
0,3
22
1 MΩ
0,25 MΩ
1 MΩ
0,15
2.500
12,6
+100

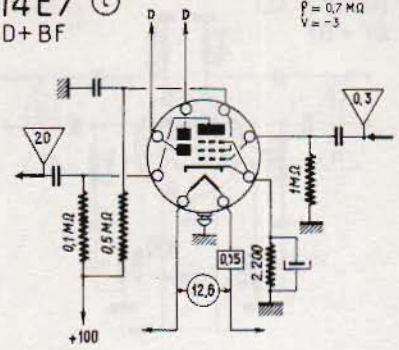
14E6 (7E6) L
D+BF

S = 1,9
ρ = 8.500
V = -9



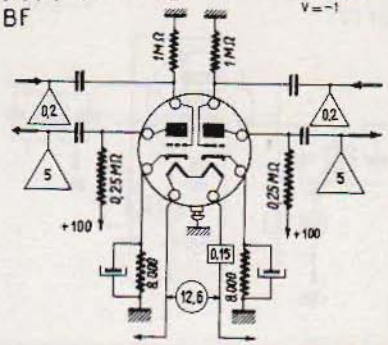
14E7 L
D+BF

S = 1,3
ρ = 0,7 MΩ
V = -3



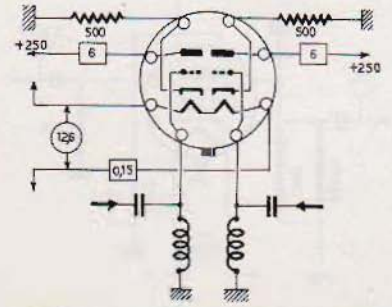
14F7 (7F7) L
BF

S = 1,125
ρ = 62.000
V = -1



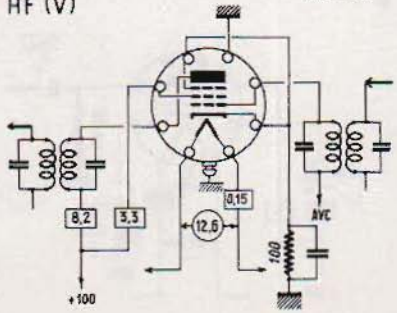
14F8 O
HF

S = 3,3
y = 48



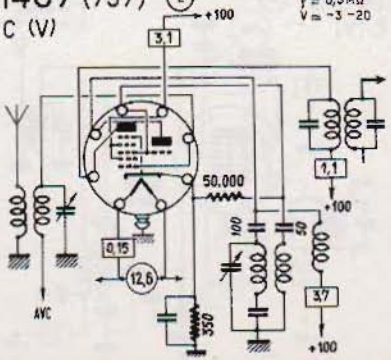
14H7 (7H7) L
HF (V)

S = 3,8
ρ = 0,25 MΩ
V = -1 -12



14J7 (7J7) L
C (V)

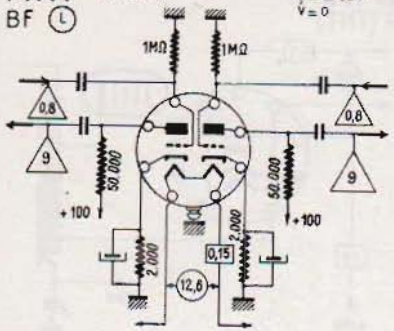
S = 0,26
ρ = 0,3 MΩ
V = -3 -20



14N7 (7N7)

BF (L)

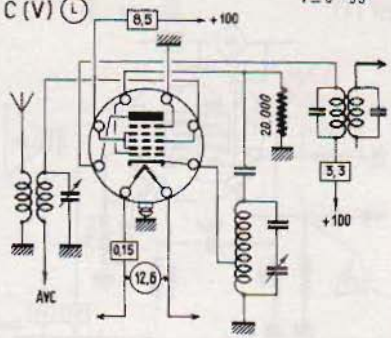
S = 3
ρ = 6700 Ω
V = 0



14Q7 (7Q7)

C (V) (L)

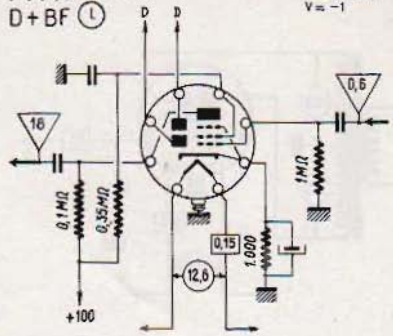
S = 0,525
ρ = 0,5 MΩ
V = 0 -35



14R7 (7R7)

D+BF (L)

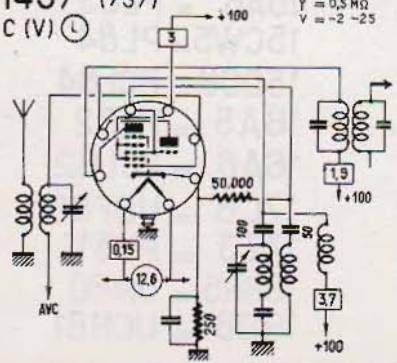
S = 3
ρ = 0,35 MΩ
V = -1



14S7 (7S7)

C (V) (L)

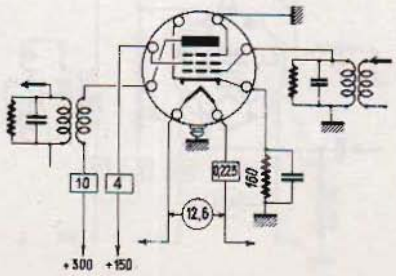
Sc = 0,5
ρ = 0,5 MΩ
V = -2 -25



14W7 (7W7) (L)

HF (T)

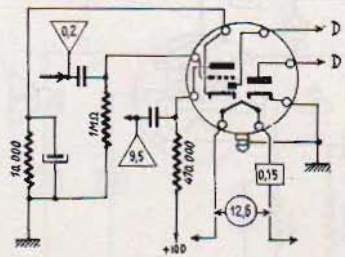
S = 3,8
ρ = 0,3 MΩ
V = -2,2



14X7 (L)

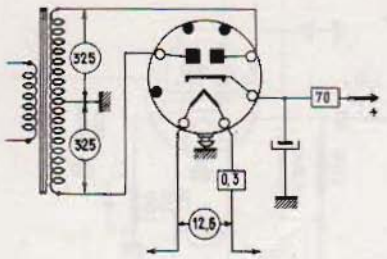
D+BF

S = 1,5
ρ = 85.000
V = -1



14Y4 (L)

R

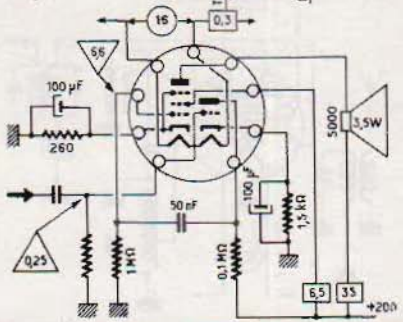


16CN8 (N)

BF (T)

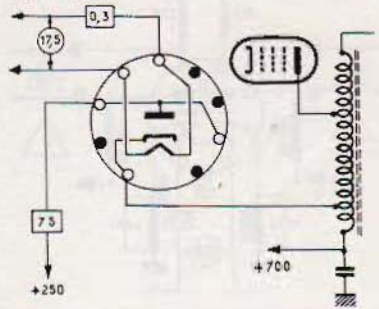
TRIODE S = 4,9 ρ = 12 kΩ V = −2 I = 60

PENTHODE S = 6,4 ρ = — V = −1,6



17H3 (N)

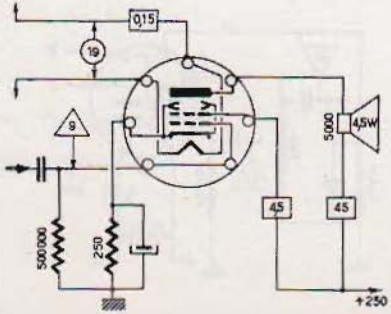
R (THT)



19AQ5 (M)

P

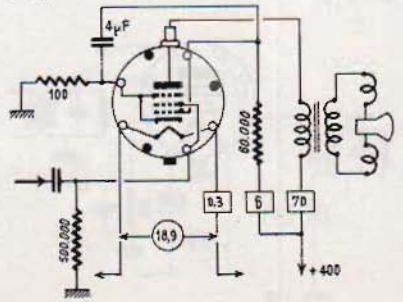
S = 4,1
ρ = 52.000
V = −12,5



19BG6 (O)

P(T)

S = 6
V = −50(max)

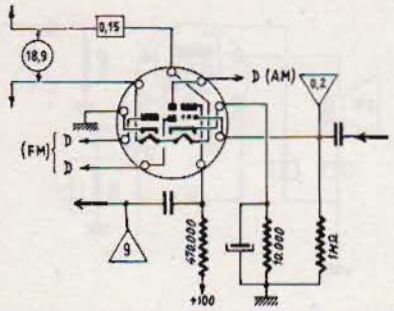


15A6 = PL83
15CW5 = PL84
15DQ8 = PCL84
16A5 = PL82
16A8 = PCL82
17C8 = UBF80
17Z3 = PY81
19BR5 = UM80
19D8 = UCH81

19C8 (AM/FM) (N)

D + BF

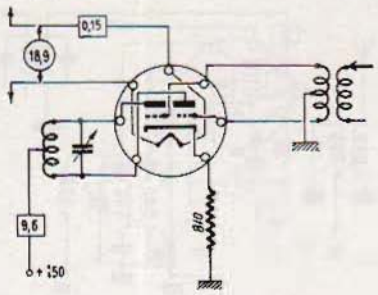
S = 1,25
P = 80.000
V = -1



19J6 (M)

HF (T)

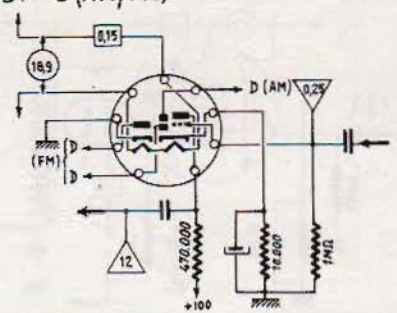
S = 1,9
P = 10.200
V = -8



19T8 (N)

BF + D (AM/FM)

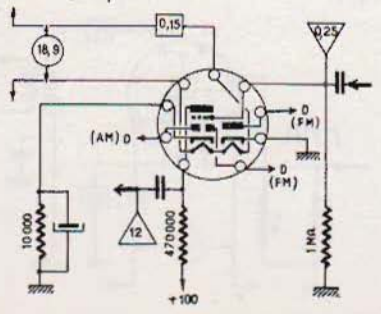
S = 1,3
P = 54.000
V = -1



19V8 (N)

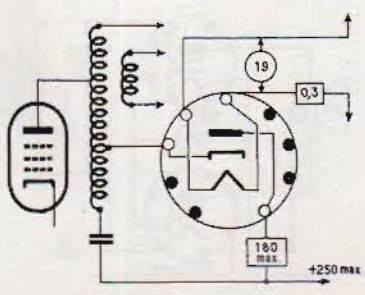
BF + D (AM/FM)

S = 1,3
P = 54.000
V = -1



19X3 / PY80 (N)

R (T)

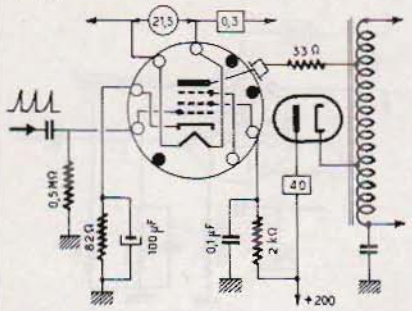


19D3 = UCH81
19Y3 = PY82
21A6 = PL81
25E5 = PL36
19W3 } = PY80
19U3 }

21B6 (N)

P (T)

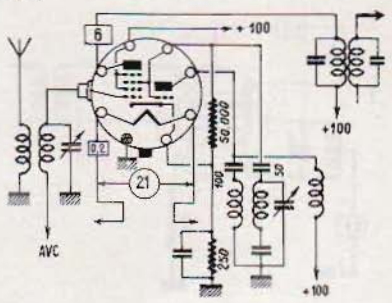
S = 6
ρ = 11 MΩ
V = −28



21TH8 (6TH8) (O)

C (V)

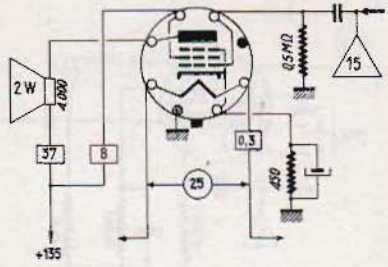
Sc = 0,27
ρ = 2 MΩ
V = −3 −28



25A6 (O)

P

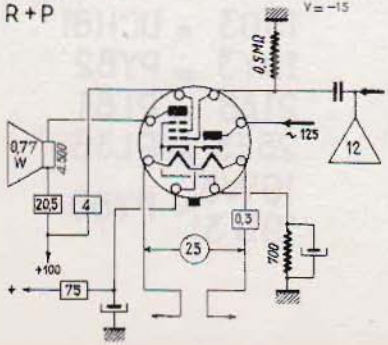
S = 2,4
ρ = 35 000
V = −20



25A7 (O)

R + P

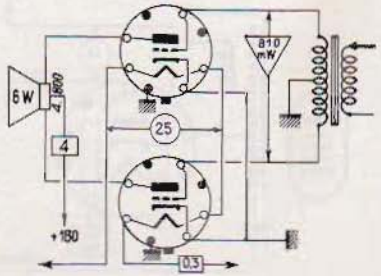
S = 1,8
ρ = 50 000
V = −15



25AC5 (O)

P (Cl. B)

S = 3,8
ρ = 15 200 Ω



25AV5 (6AV5) (O)

P (T)

S = 5,8
V = −22,5