

RL INGRESSO

AMPLIFICATORE HF DA 800 WATT CON VALVOLA 3CX800

RL USCITA

ANTENNA

Dispositivo scarica AT

3.5 nF 5kV

LOAD

50-2000

10-500 5kV

PLATE

50 nF mica

CHOKE

1000 pF 5kV

SMA

10 nF mica

PLATE

3CX800

griid 4-7-11

5-6

Flamanti

ca tutto 1-2-3 8-9-10

L7 VK200

L8 VK200

1000 pF

10K 10W

2N3855

5,1V

RL3B

1000 pF

CC ANDODICA M1

1000 pF

20V

CC GRIGLIA M2

100 mA

1000 pF

100 nF

1M1198

100 N

10K

1000 pF

1 nF

50 microA M3

100

68

100

100

47

1M1198

100 N

10K

1000 pF

1 nF

100

1000 pF

1000 pF

1000 pF

1000 pF

1000 pF

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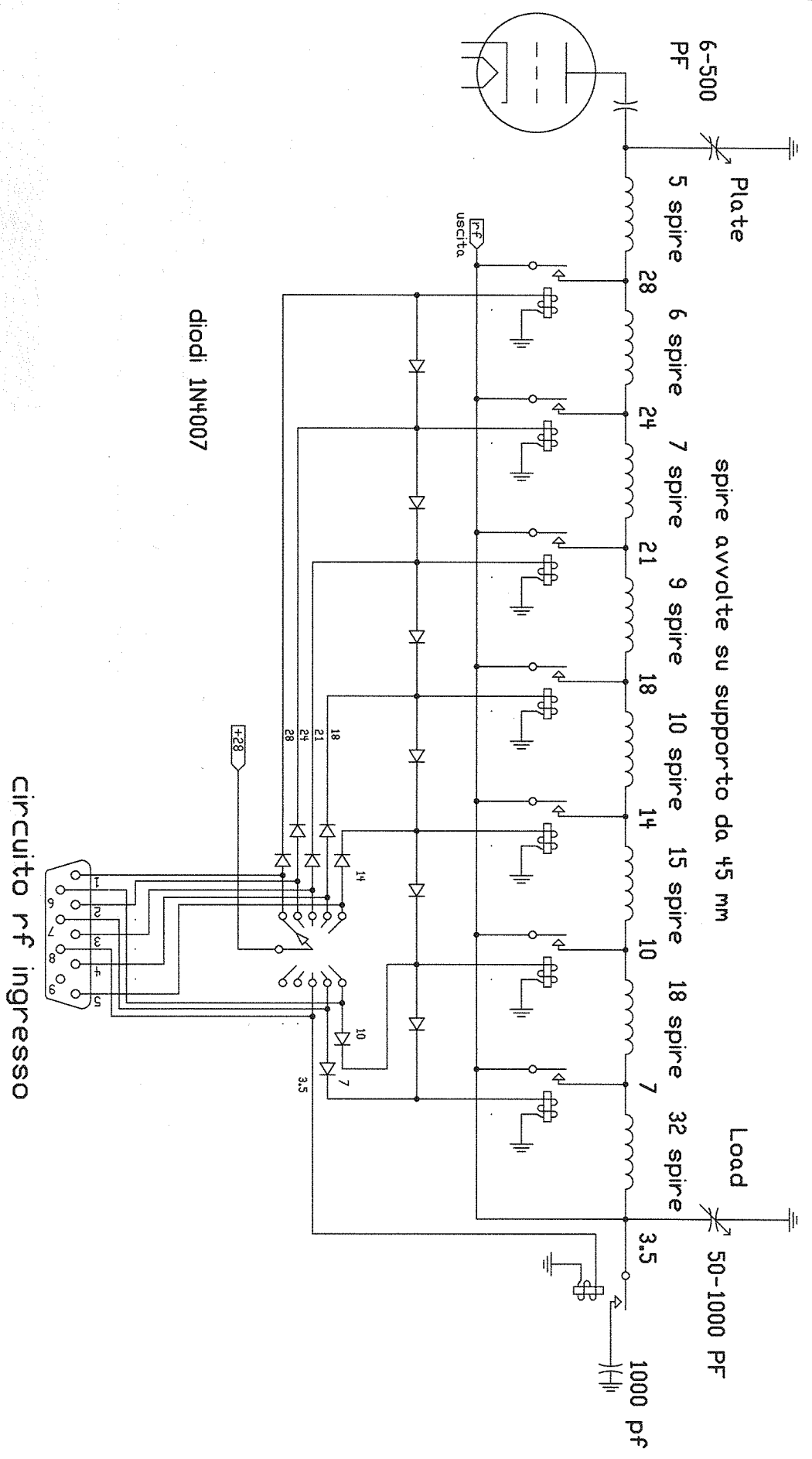
1000 pF

1000 pF

1000 pF

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1000 pF



diodi 1N4007

circuitto rf ingresso

commutazioni 3CX800 hf

3cx800

Eingangs-Impedanz Z_1 in Ohm = 3000

Ausgangs-Impedanz Z_2 in Ohm = 50

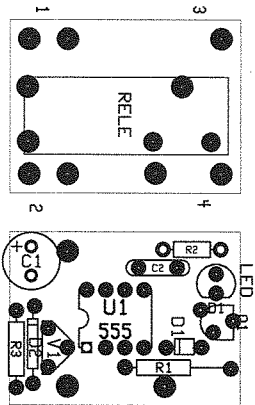
Wählen Sie eine Güte Q zwischen 11 und 33

Optimal ---> $Q = 16$

<Q> ? 16

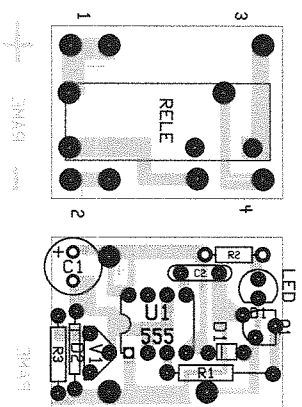
MHz	C1 (PF)	C2 (PF)	L (μ H)
3.65	233	1580	9.07
7.05	120	818	4.69
10.10	84	571	3.28
14.20	60	406	2.33
18.10	47	319	1.83
21.20	40	272	1.56
24.95	34	231	1.33
28.70	30	201	1.15

CIRCUITO STAMPATO TIMER 3 MINUTI

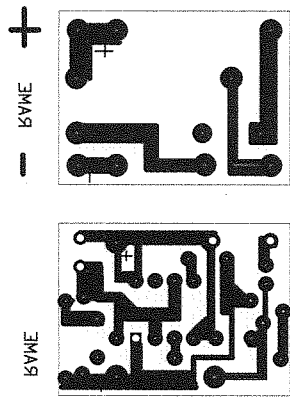


LE DUE BASETTE VENGONO SOVRAPPOSTE E COLLEGATE
VERTICALMETE IN TRE PUNTI

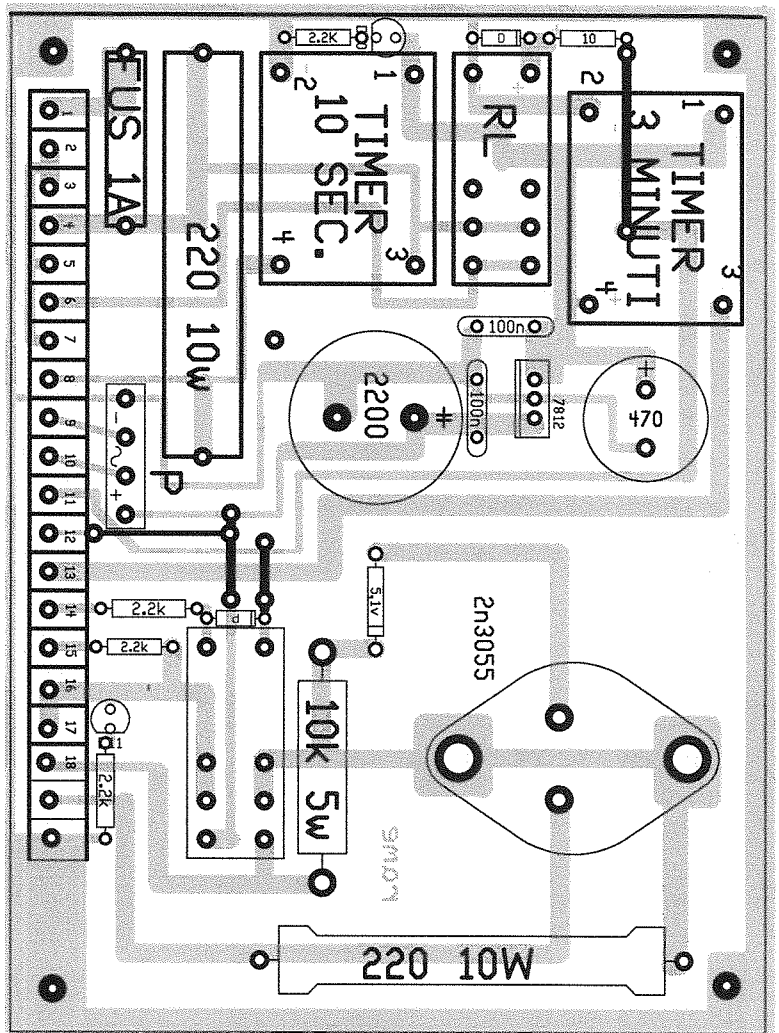
CIRCUITO STAMPATO TIMER 3 MINUTI



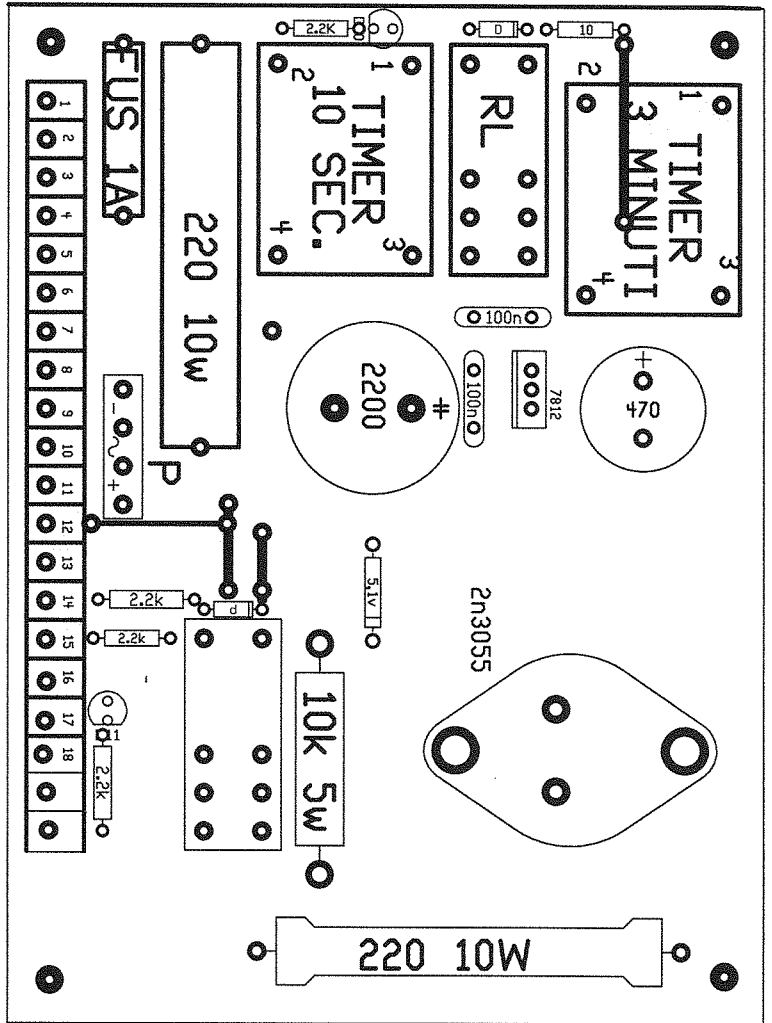
LE DUE BASTETTE VENGONO SOVRAPPOSTE E COLLEGATE
VERTICALMETE IN TRE PUNTI



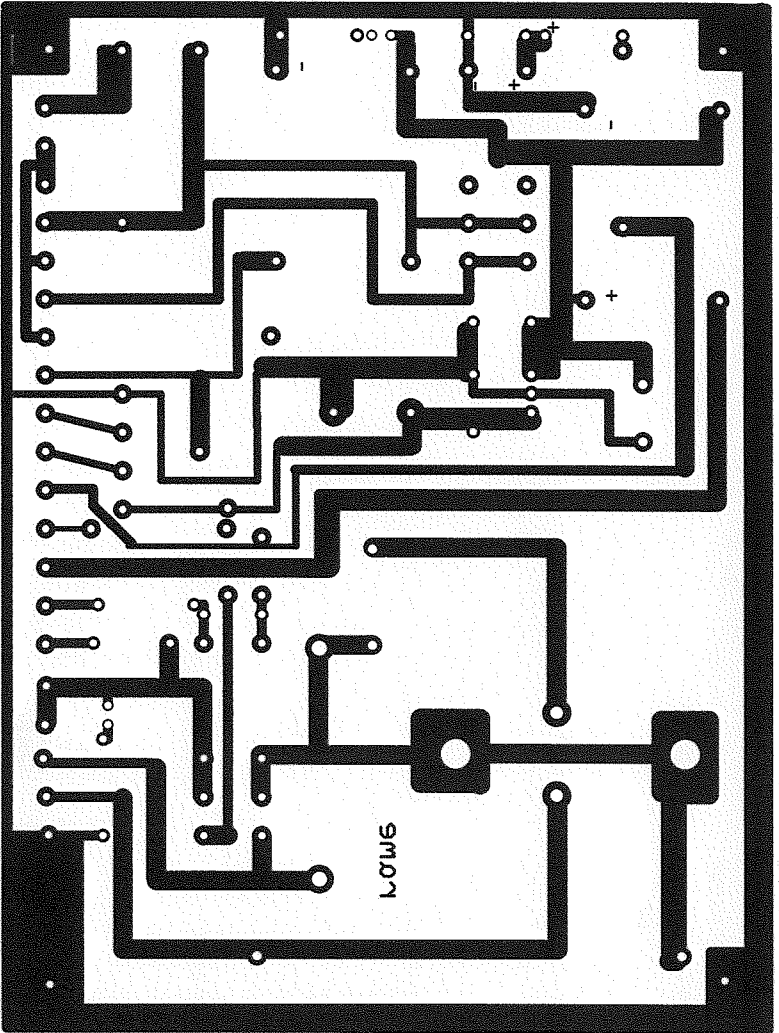
- ingresso 220
- uscita 220 trasf. servizi
- uscita 220 pilota teleruttore
- uscita 220 trasf. filamenti
- ingresso 20 v. alternata
- ingresso 20 v: alternata
- + 12 volt dall' inter.
- +28v al comm. banda
- +12 volt all' inter.
- ptt
- led tx
- rl antenna
- rl antenna
- dal catodo
- allo strumentino
- massa



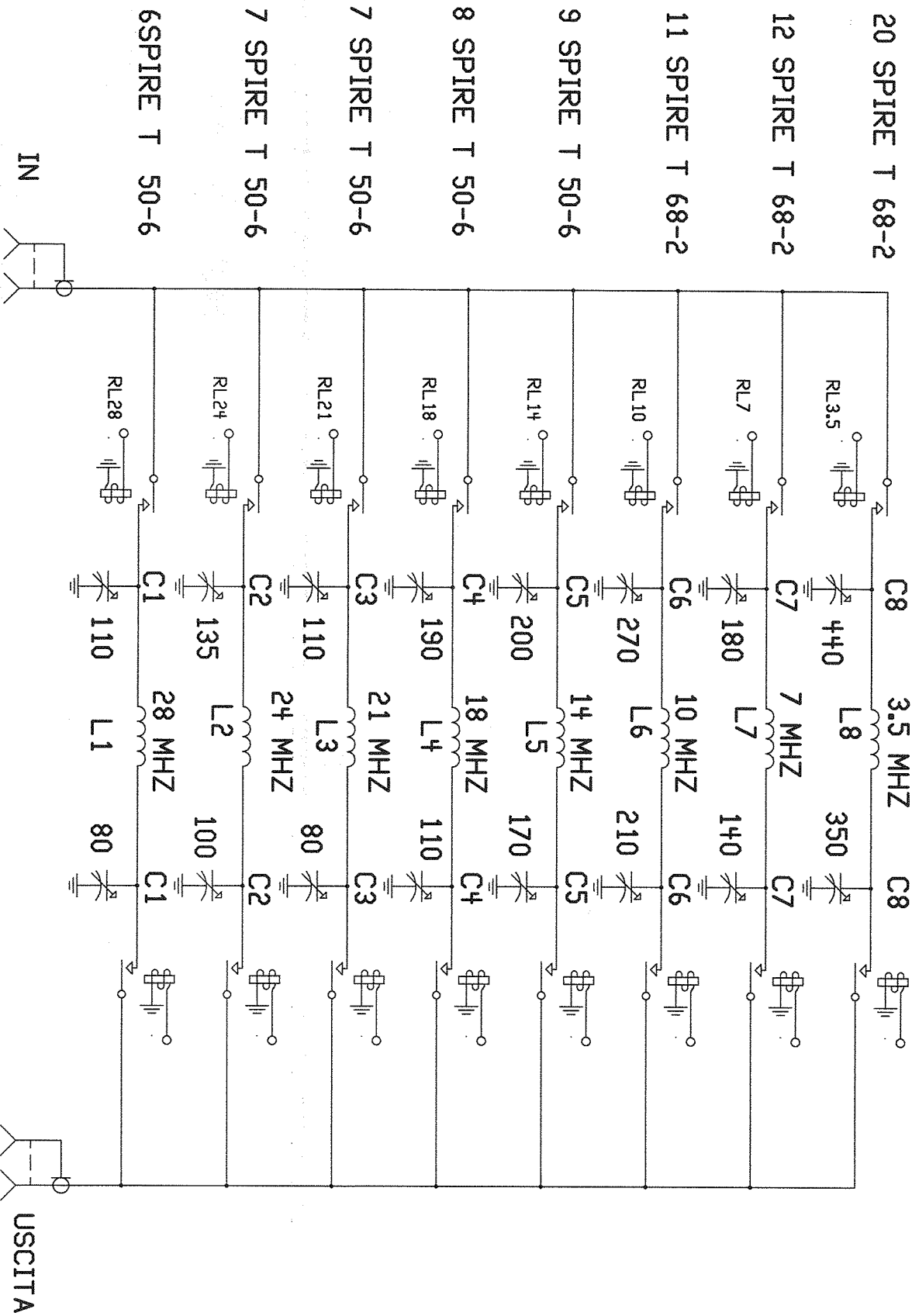
- ingresso 220
- uscita 220 trasf. servizi
- uscita 220 pilota teleruttore
- uscita 220 trasf. filamenti
- ingresso 20 v. alternata
- ingresso 20 v: alternata
- + 12 volt dall' inter.
- +28v al comm. banda
- +12 volt all' inter.
- ptt
- led tx
- rl antenna
- rl antenna
- dal catodo
- allo strumentino
- massa



EMAR OTAJ

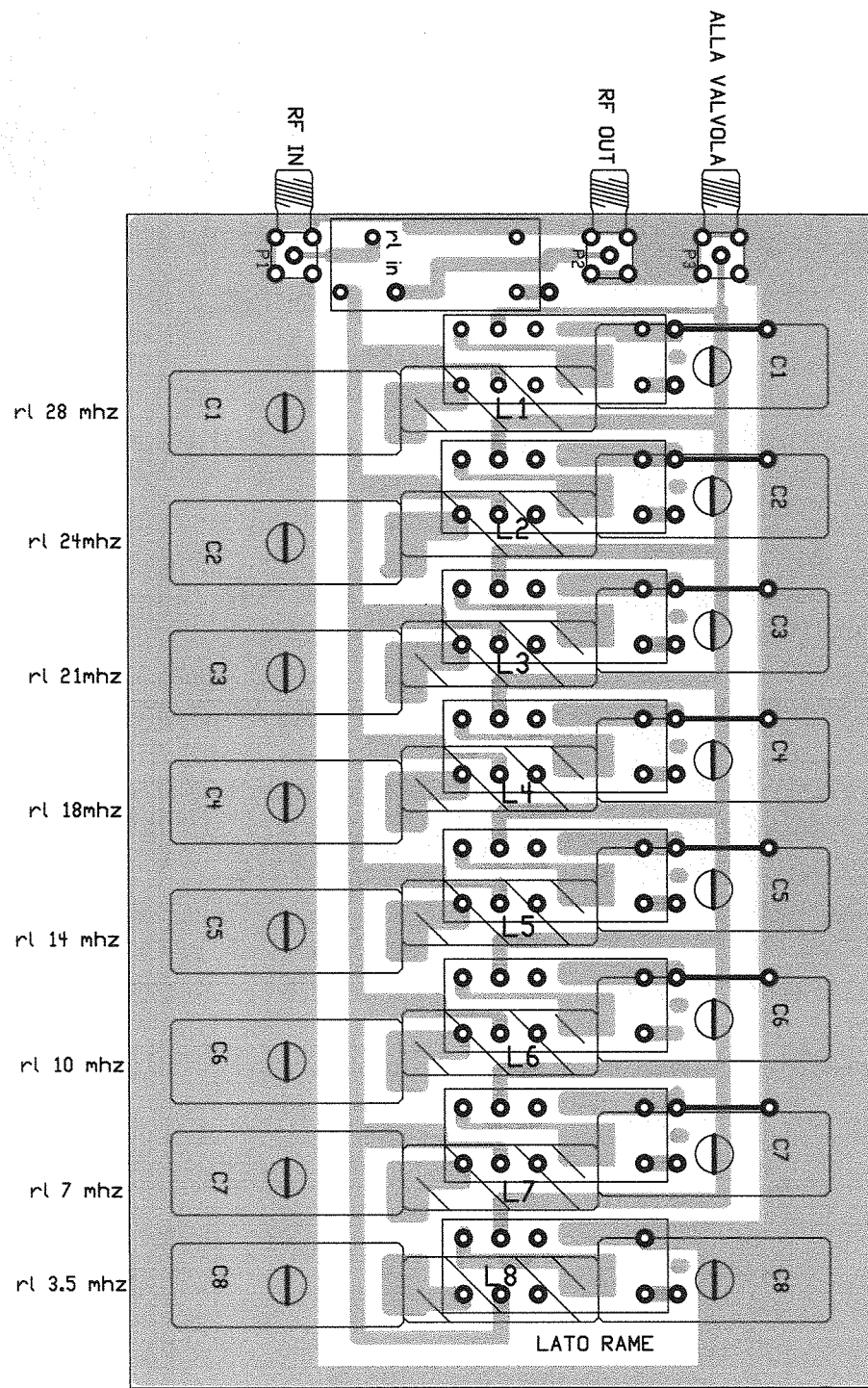


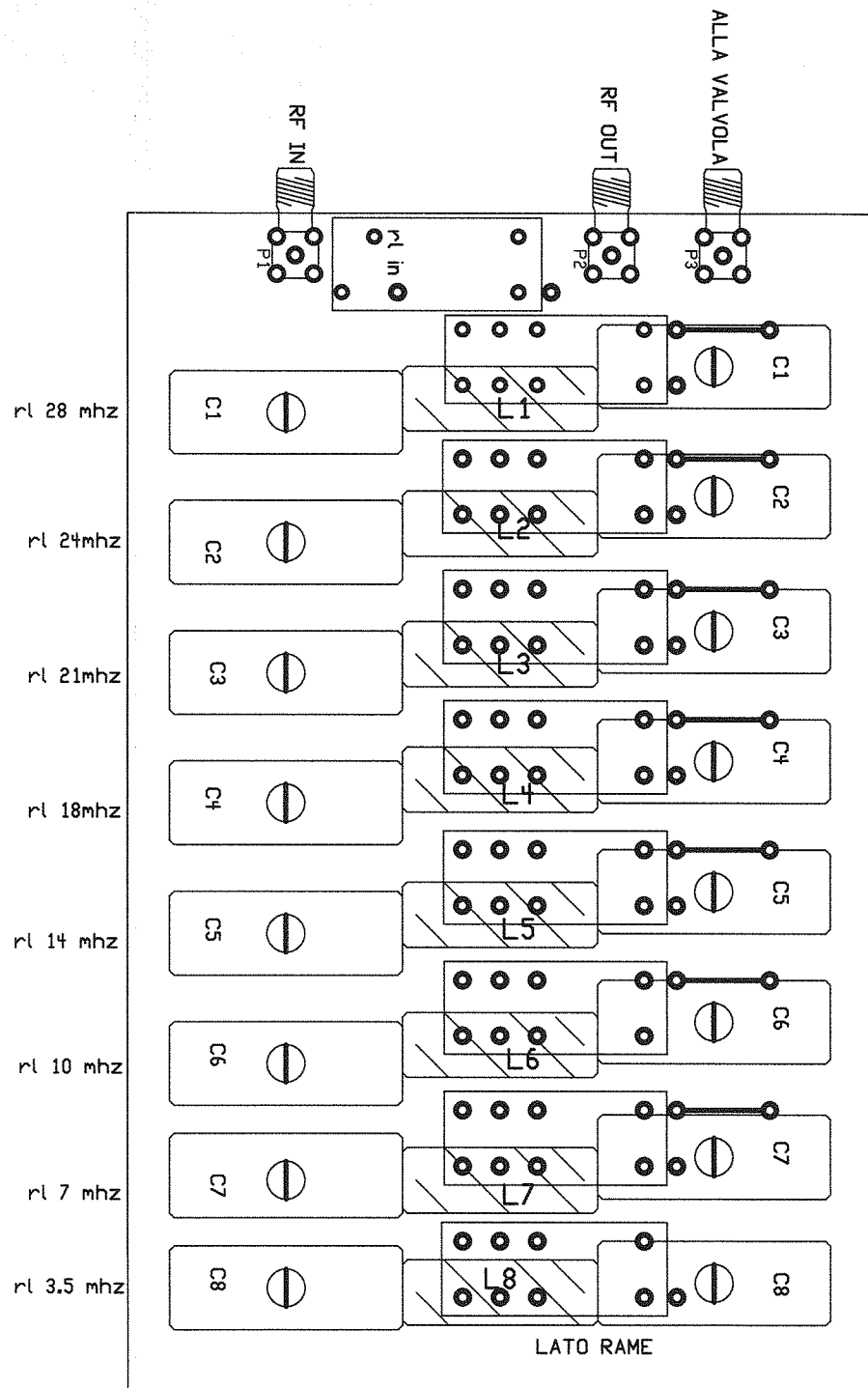
ACCORDI
INGRESSO



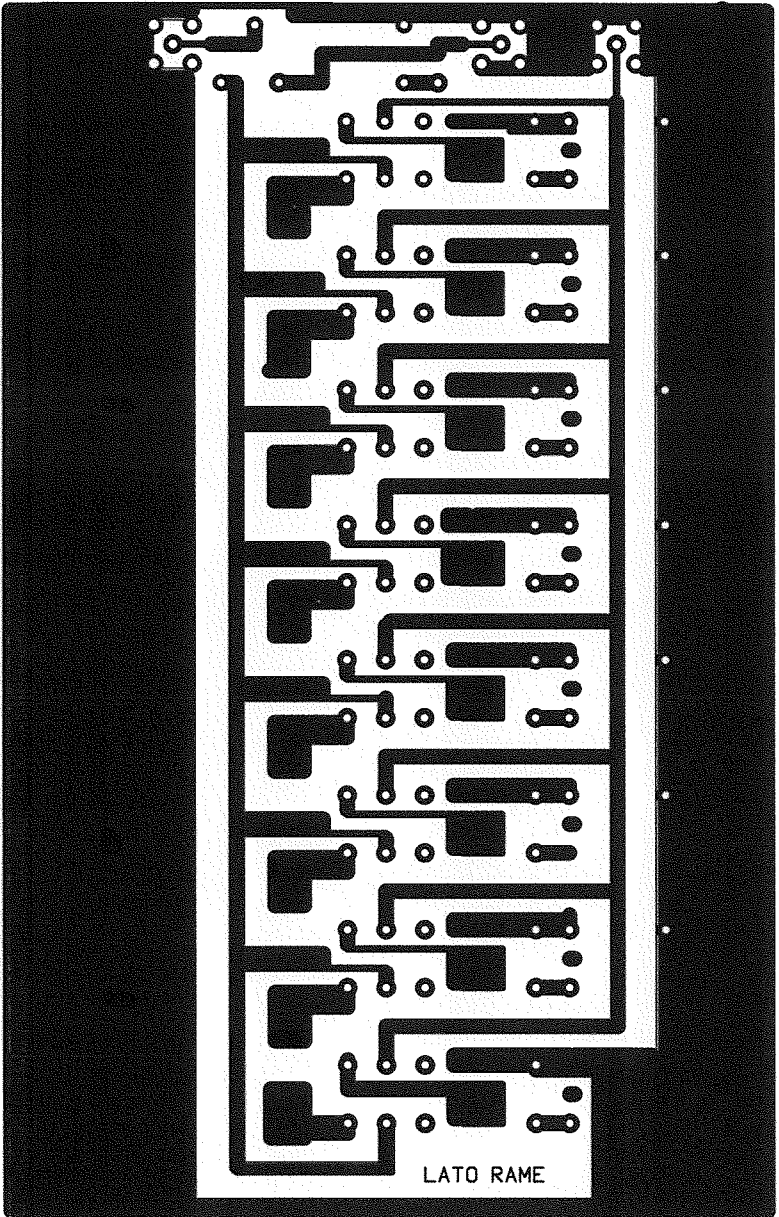
RF IN 3CX800

RF IN 3CX800 LATO RAME

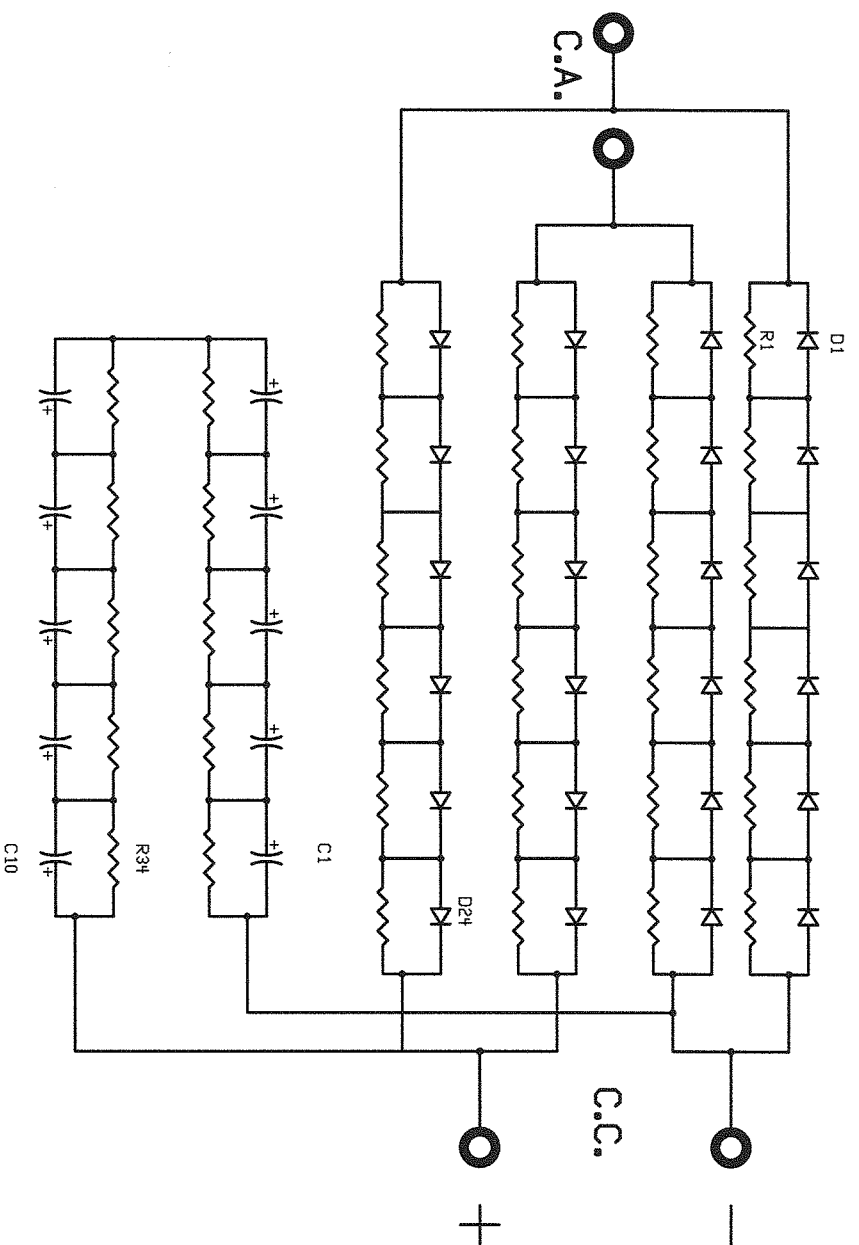




EMAR OTAJ

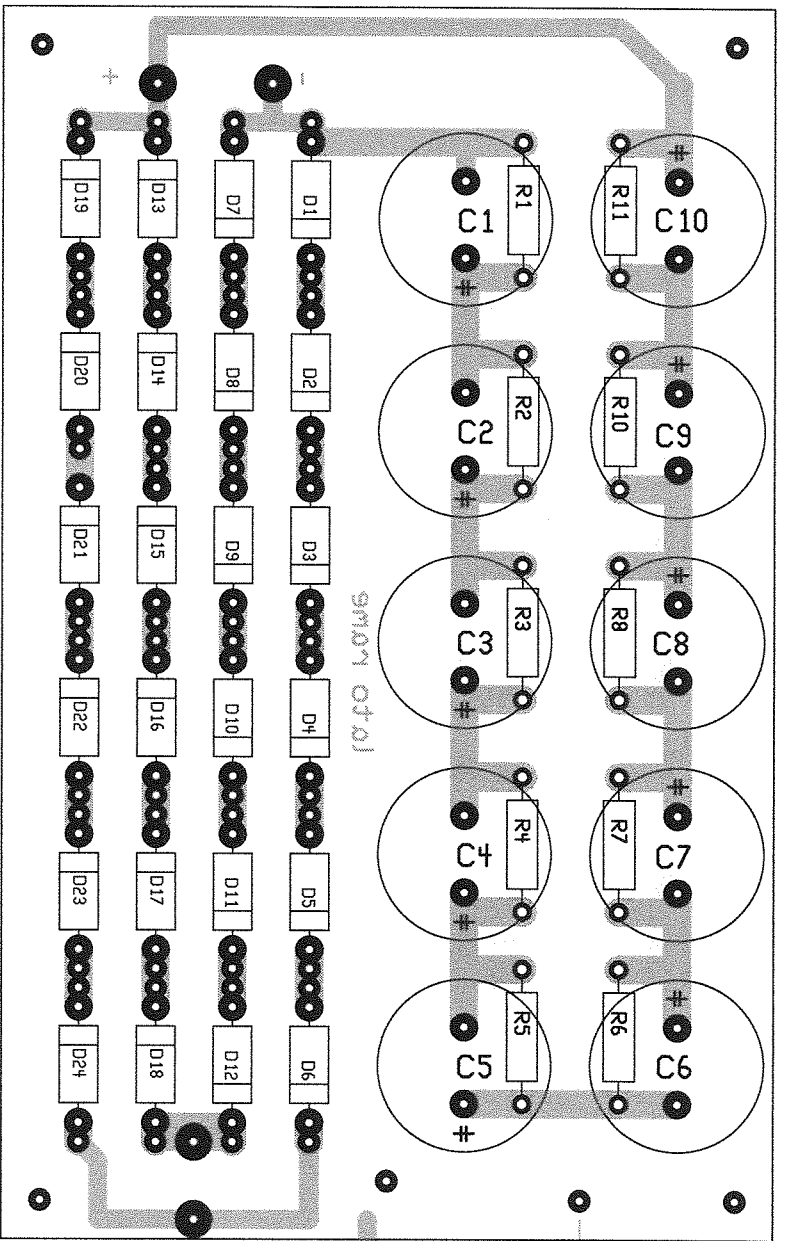


RFIN 3CX800 LATO RAME

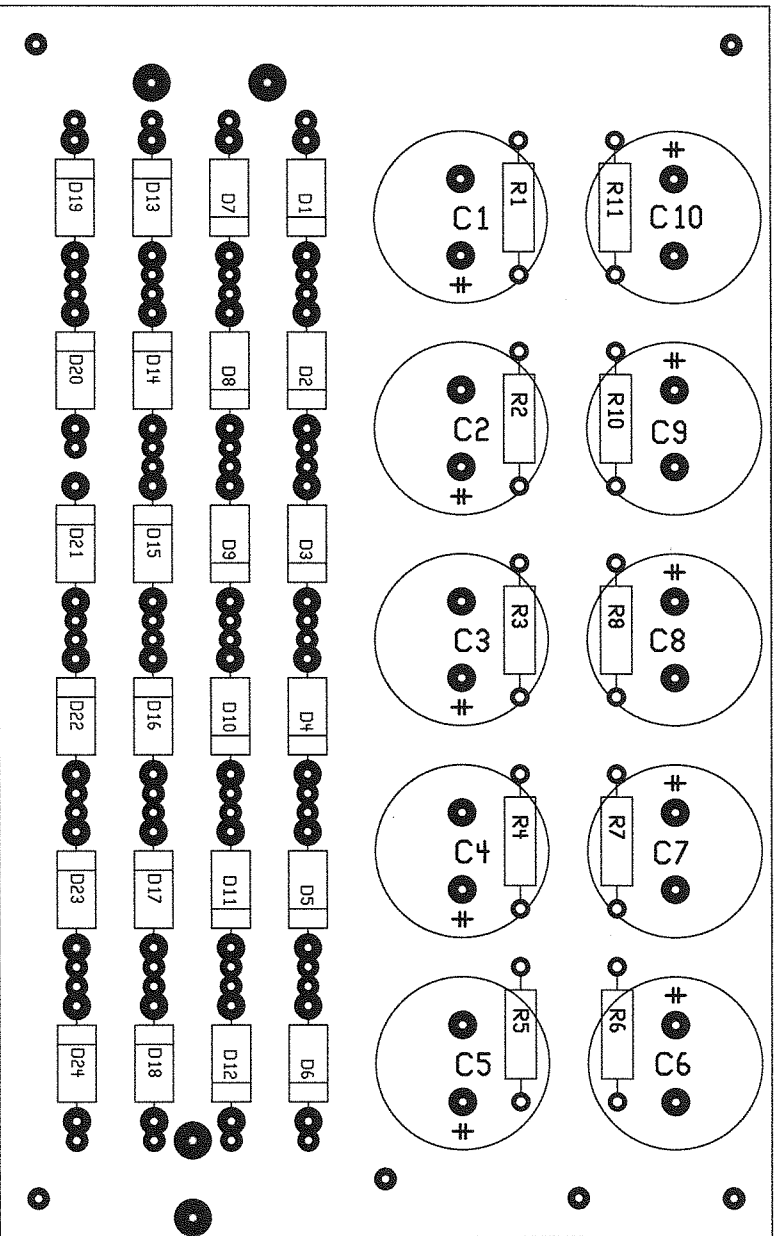


- D1 / D 24 BY255
- R1 / R 34 1 MOHM 2 WATT
- C1 / C 10 100 MICROF. 400 V

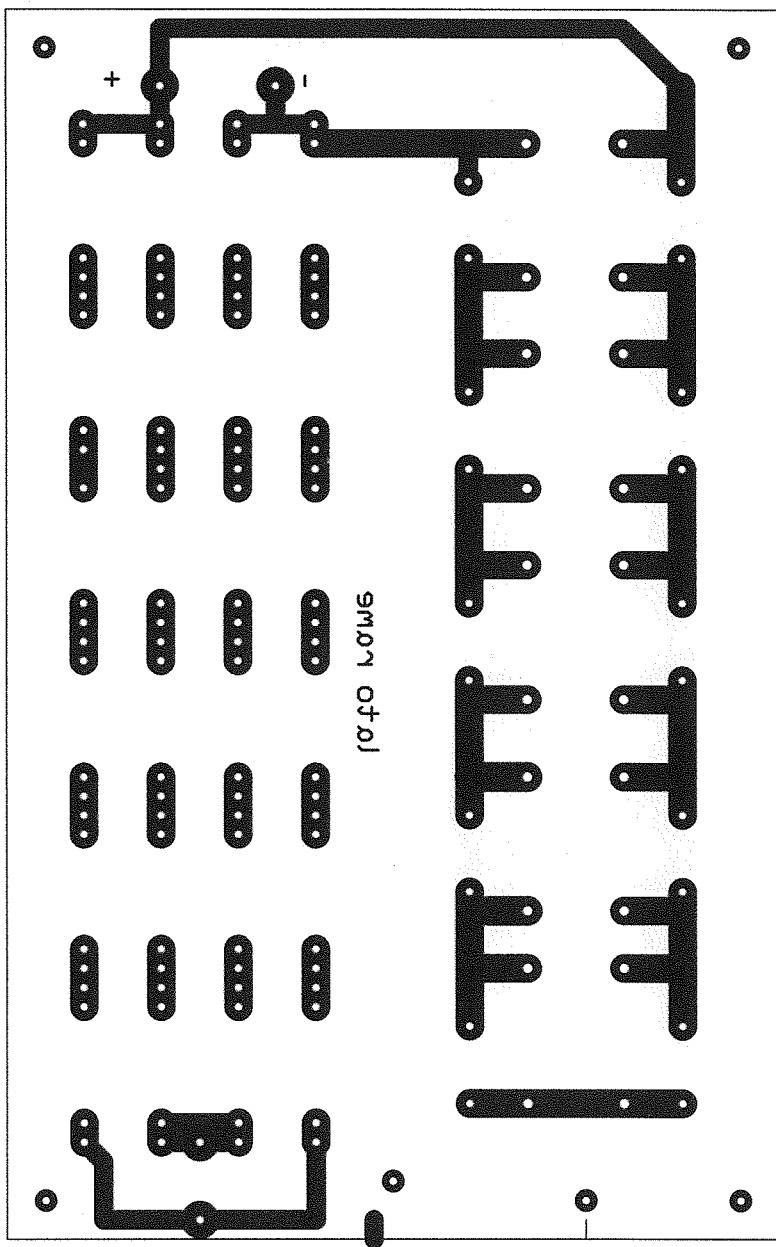
PONTE RADDRIZZATORE E CONDENSATORE DI FILTRAGGIO



parte diodi e condensatori



ponte diodi e condensatori



choke alimentazione AT su teflon

44 spire

57 spire

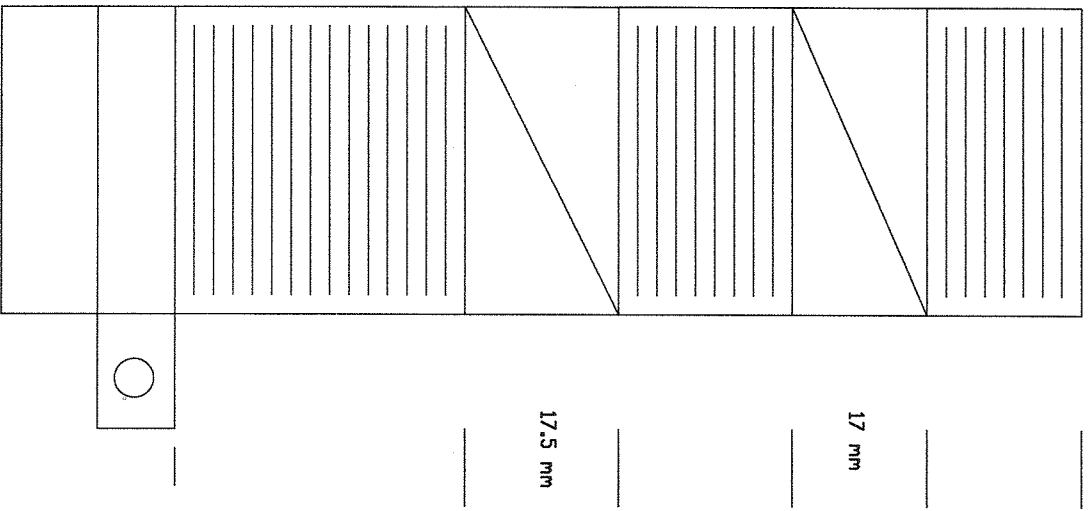
83.5 spire

25 mm

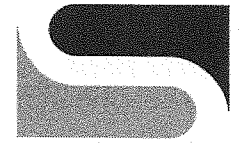
17 mm

17.5 mm

filo da 0.36 mm diametro
totale di 250 microH.



Svetlana 3CX800A7 High-Mu Power Triode



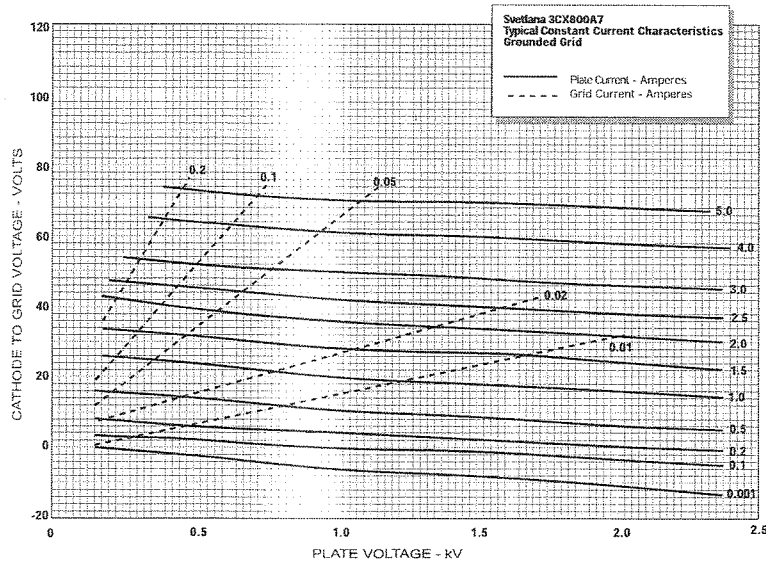
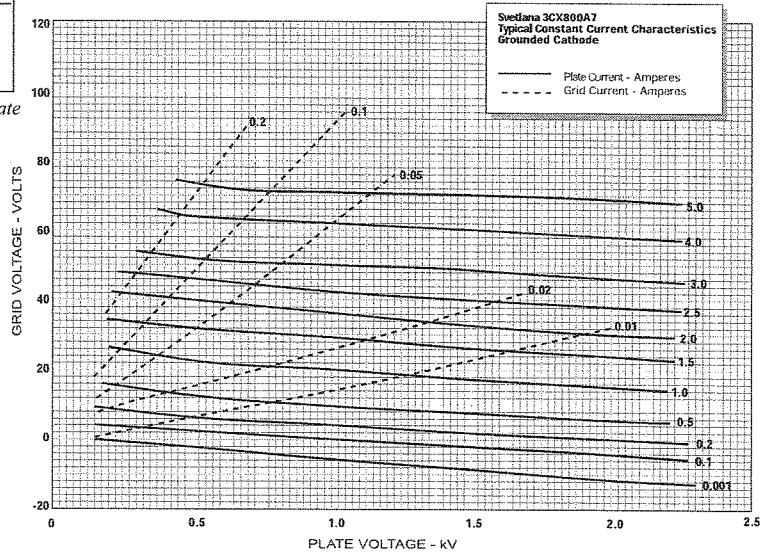
Svetlana
ELECTRON DEVICES

Typical Operation, Class AB ₂ , Grounded Grid	CW	SSB	
DC plate voltage	2200	2200	V
DC cathode voltage	+8.2	+8.2	V
Zero signal plate current	-	15	mA
Plate current	500	313*	mA
DC grid current	36	16	mA
Cathode input impedance	54	54	ohms
Power output	750	750	W
RF driving power	23	23**	W
Resonant load impedance	2700	2700	Ohms

*Two tone **Peak

Cooling Air at 25°C				
Anode* Dissipation Watts	Sea Level		5,000 Feet	
	Air Flow CFM	Pressure Drop Inches of Water	Air Flow CFM	Pressure Drop Inches of Water
400	6	0.09	7	0.10
600	11	0.20	14	0.23
800	19	0.50	23	0.57

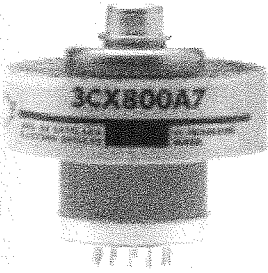
Note: When cooling air inlet temperature is raised to 50°C, flow rate must be increased approximately 40%.



SVETLANA TECHNICAL DATA

3CX800A7

High-Mu Power Triode



The Svetlana™ 3CX800A7 is a high performance ceramic/metal high-mu power triode designed for use in communications and industrial service. The principal use is as Class AB₂, Class B and Class C RF amplifiers.

The Svetlana 3CX800A7 may also be operated as a pulse modulator operating at maximum plate voltages to 4500 volts. Maximum plate current is 8 amps at a pulse duration of 100 microseconds.

The Svetlana 3CX800A7 is a direct replacement for the model 3CX800A7 manufactured in the United States.

Characteristics

Electrical

Cathode	Oxide-coated unipotential
Heater Voltage (AC or DC)	13.5 ± 0.6 V
Heater Current @ 13.5V	1.5 A
Amplification factor (average)	200
Maximum Frequency for Full Ratings:	
CCS	350 MHz
ICAS	450 MHz
Interelectrode capacitances, with grid grounded:	
Input	26.0 pF
Output	6.1 pF
Plate-Cathode	0.05 pF

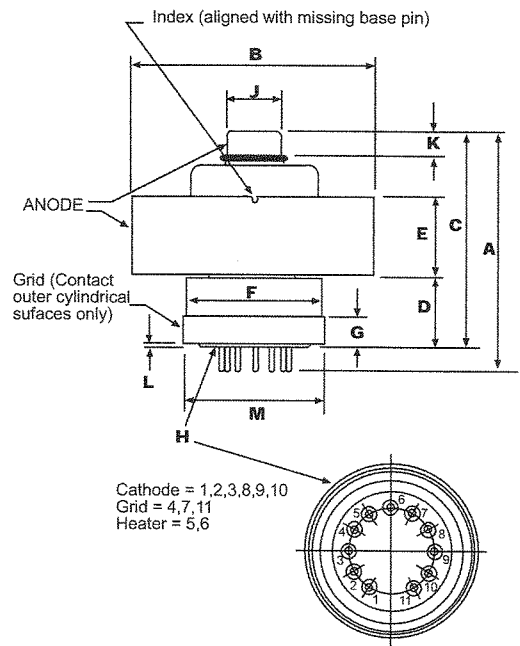
Mechanical

Cooling	Forced air
Base	large 11 pin wafer (EIA E11-81)
Socket	11 pin E.F. Johnson #124-311-100
Anode Connector	Svetlana AC-1
Operating position-	any
Maximum dimensions:	
Diameter	64 mm (2.52 in.)
Length	67 mm (2.63 in)
Maximum operating temperature	250° C
Net weight (average)	.341 kg (0.75 lb.)

Maximum ratings

DC plate voltage	2500	V
Maximum-signal DC plate current	600	mA
Plate Dissipation	800	W
Grid Dissipation	4.0	W
DC grid current	60	mA

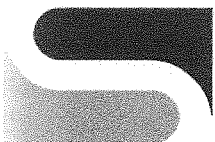
Svetlana Outline drawing



Dimensional Data

Dim.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	59.44	66.88	2.344	2.633
B	63.119	63.881	2.485	2.515
C	54.66	59.74	2.152	2.352
D	19.964	23.013	.786	.906
E	18.034	20.066	.710	.790
F	—	35.712	—	1.406
G	4.750	—	.187	—
H	BASE: E11-81 (EIA DESIGNATION)			
J	14.199	14.554	0.559	0.573
K	6.096	—	0.240	—
M	35.992	36.398	1.417	1.433

4/97



Svetlana
ELECTRON DEVICES

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