FAST LINEAR
DC-RESTORED FANOUT

L 1013

MOD. MARS 1979
AOUT 1978
IPNL M. DOY

FAST LINEAR DC - RESTORED FANOUT L 1013

****

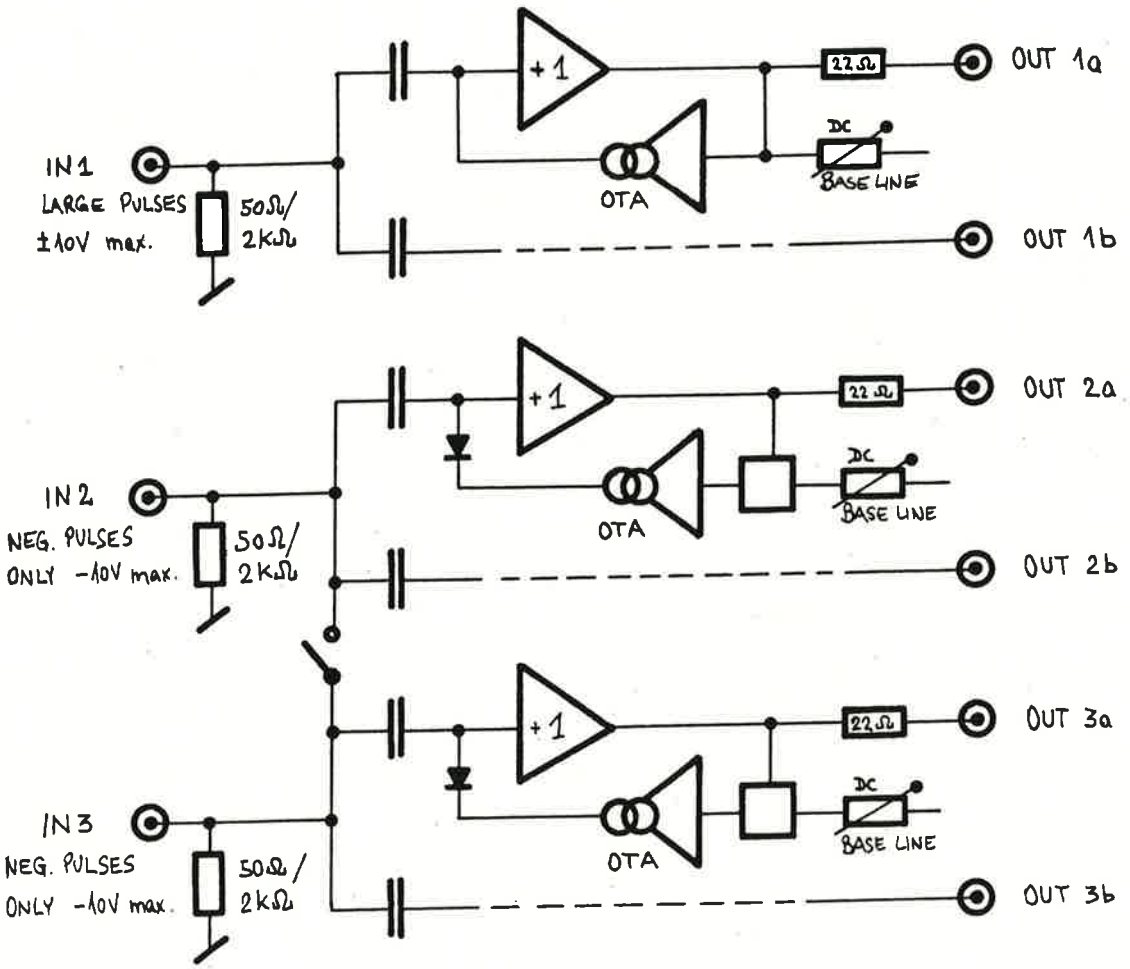
SPECIFCATIONS (15 mars 1979)

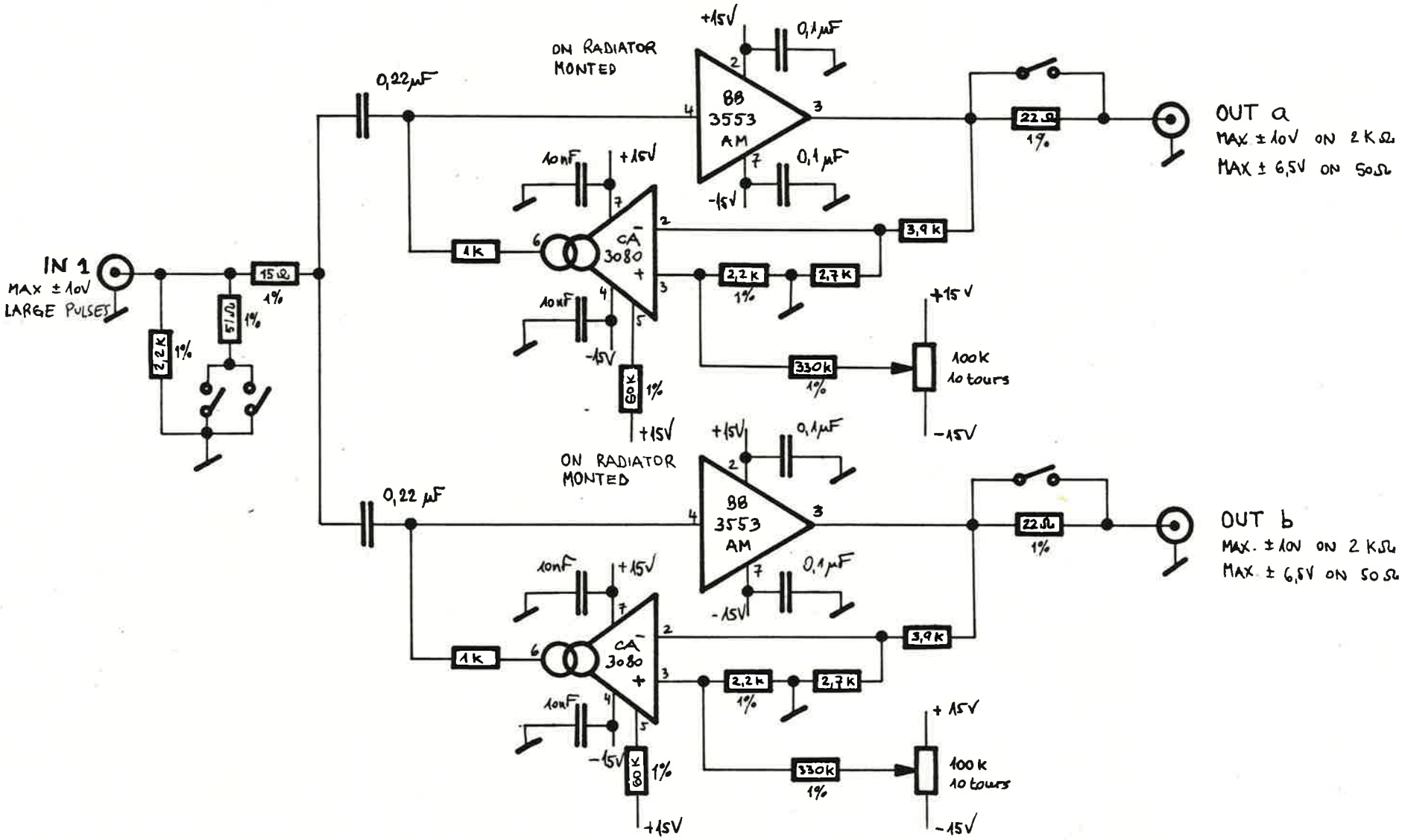
Channel 1 is optimized for large spectrometric pulses (± 10V) from the output of a spectrometric amplifier.
Channel 2 and 3 are optimized for smaller negative only pulses (about - 1V to - 2V peak).

INPUT	Ch 1 max ± 10V on 50Ω or 2kΩ, Ch 2 and 3 max - 10V on 50Ω or 2kΩ, front panel switchable
OUTPUT	Ch 1 max ± 10V on 2kΩ, max ± 6,5V on 50Ω Ch 2 and 3 max - 10V on 2kΩ, max - 6,5V on 50Ω Two independent outputs for each input Same polarity as input Base line front panel adjustable 22Ω output resistance; may be bypassed by an internal switch on the PC board; the output short-circuit protection in then removed).
50Hz REJECTION	>30 dB
BASE LINE	Ch 1 no observed base line shift if the duty cycle is <10% (10V pulses). Ch 2 and 3 no base line shift for negative pulses.
LINEARITY	No measurable deviation from linearity. Ch 2 and 3 are only linear for input pulses of magnitude greater than 10mV.

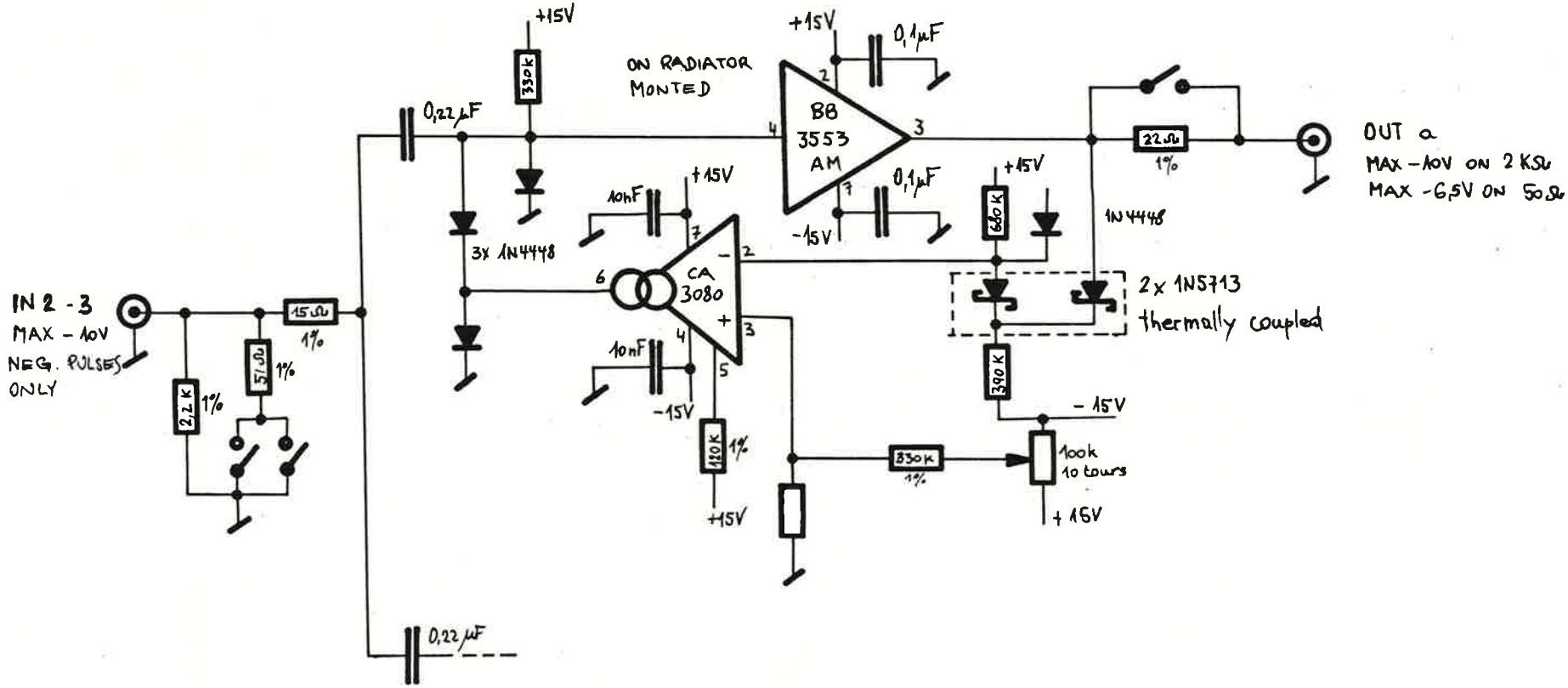
BANDWIDTH Out into 50Ω, 200Hz to 100MHz, ± 3dB and
400Hz to 60MHz, ± 1,5dB for In ± 5V pp.
Out into 50Ω, 500Hz to 110MHz, ± 3dB and
800Hz to 80MHz, ± 1,5dB for In ± 1V pp.

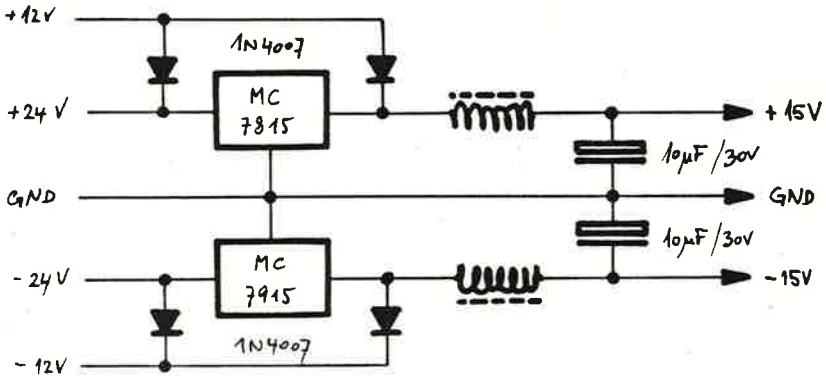
RISE TIME Ch 1 + 5V out into 50Ω: 5ns. - 5V out into 50Ω: 6,5ns
+ 1V out into 50Ω: 5ns. - 1V out into 50Ω: 5ns
Ch 2 and 3 - 5V out into 50Ω: 5ns
- 1V out into 50Ω: 5ns
- 0,1V out into 50Ω: 4,5ns




IN 1
MAX ± 10V
LARGE PULSES
2,2K 1%
51Ω 1%
15Ω 1%
0,22µF
0,22 µF
ON RADIATOR MONTED
ON RADIATOR MONTED
BB 3553 AM
CA 3080
+15V
-15V
0,1µF
10nF
1K
3,9K
2,2K 1%
2,7K
330K 1%
100K 10 tours
80K 1%
22Ω 1%
OUT a
MAX ± 10V ON 2 KΩ
MAX ± 6,5V ON 50Ω
OUT b
MAX. ± 10V ON 2 KΩ
MAX ± 6,5V ON 50Ω

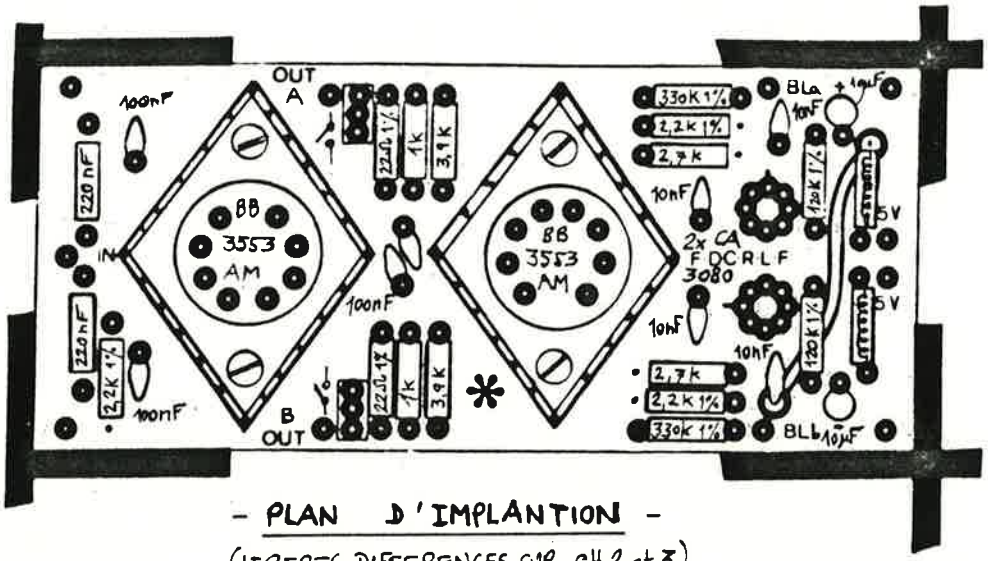
- CHANNEL 1 -





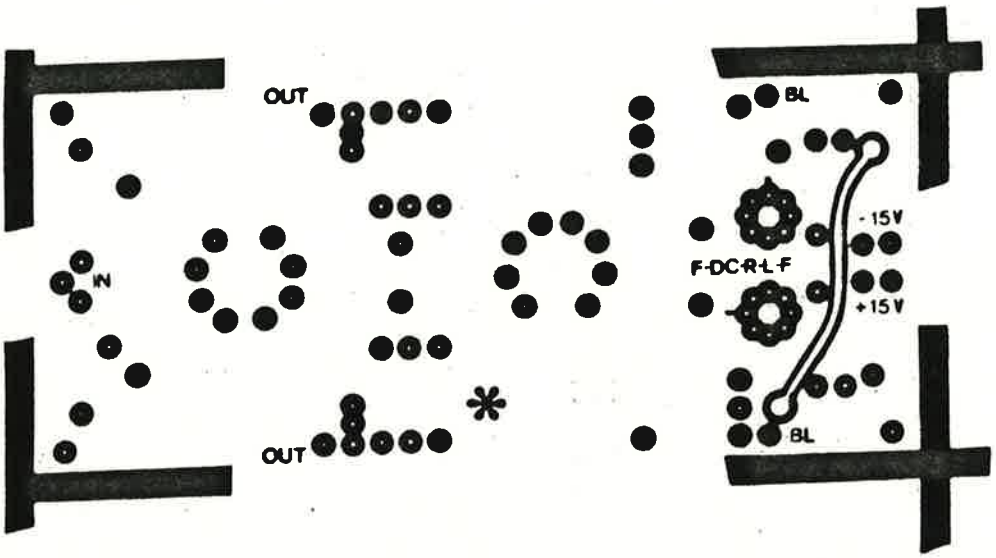
CHANNEL 2 and 3 (one half schown)

POWER SUPPLY (common to all channels)

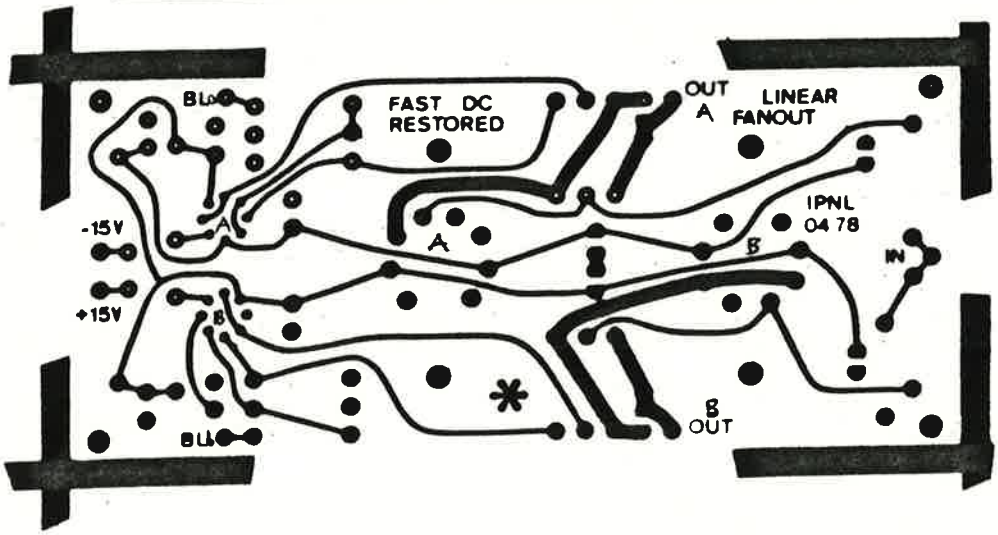


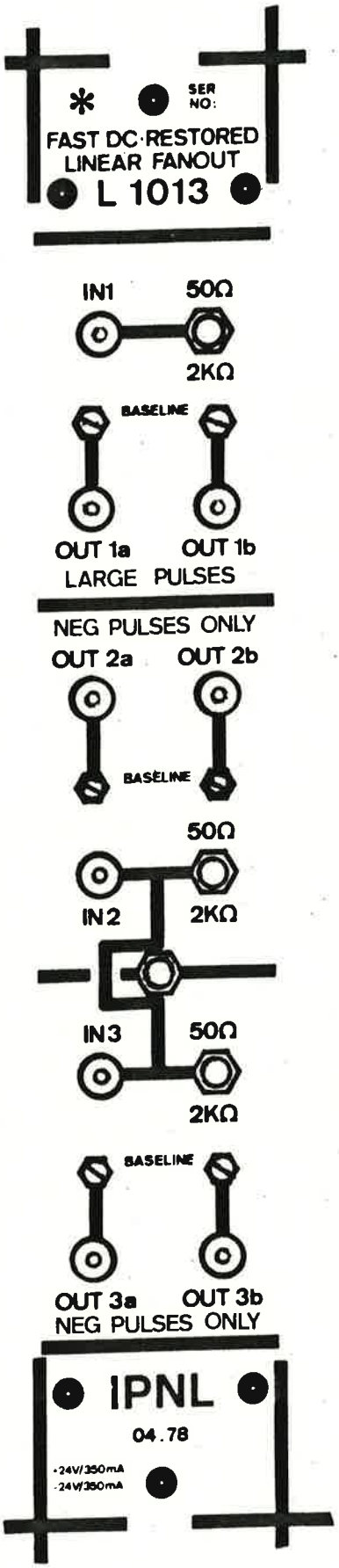
- PLAN D'IMPLANTION -

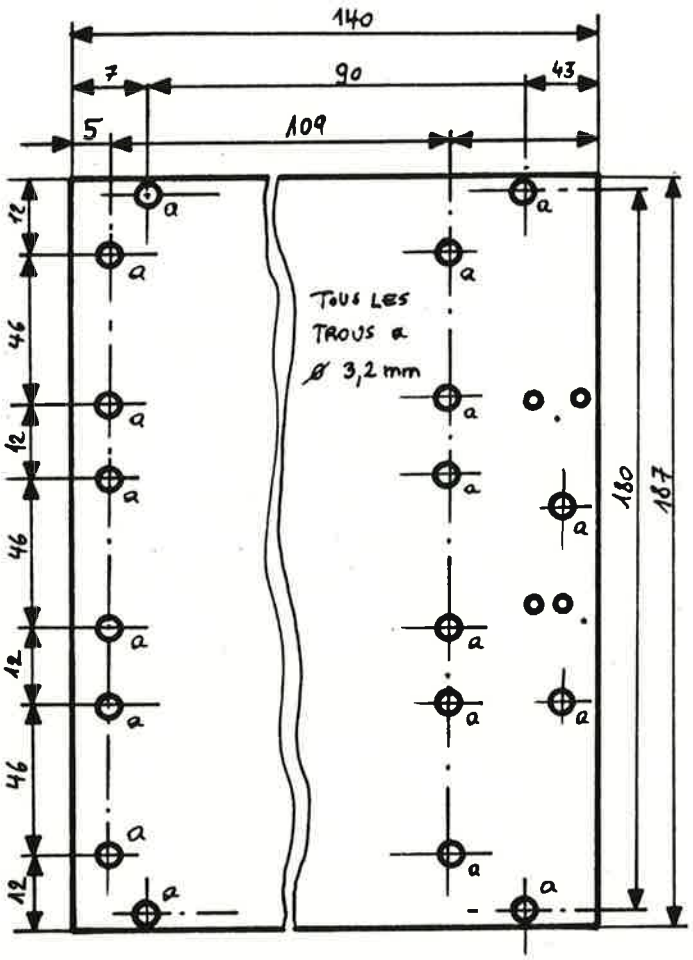
(LEGERES DIFFERENCES SUR CH.2 et 3)



- LAYOUT CIRCUIT IMPRIME ECH : 1:1 -







EPOXY CUIVRE 1 FACE
EP. 1,6 MM.
ENTRETOISES DE FIX. : 6 MM
CASSETTE STAND. NIM 1 UNITE

- MECANIQUE - FACE AVANT ET PLAQUE DE BASE -