

TECHNICAL DESCRIPTION

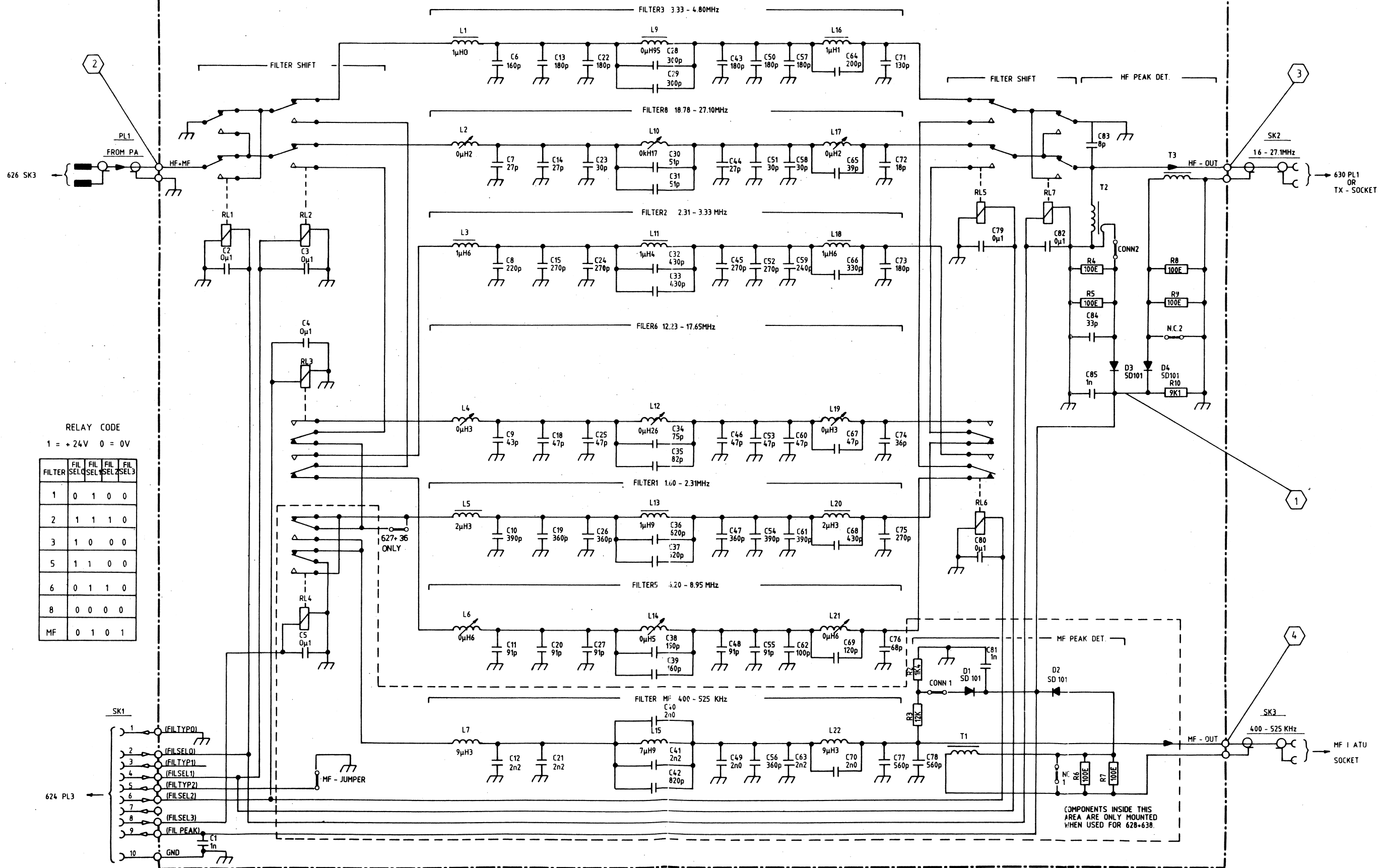
PCB **627** / **628** P.A. FILTERS, Marine Bands

The filter bank contains 6 lowpass filters covering the maritime bands in the frequency range 1.6-27.5 MHz, as shown in the table below.

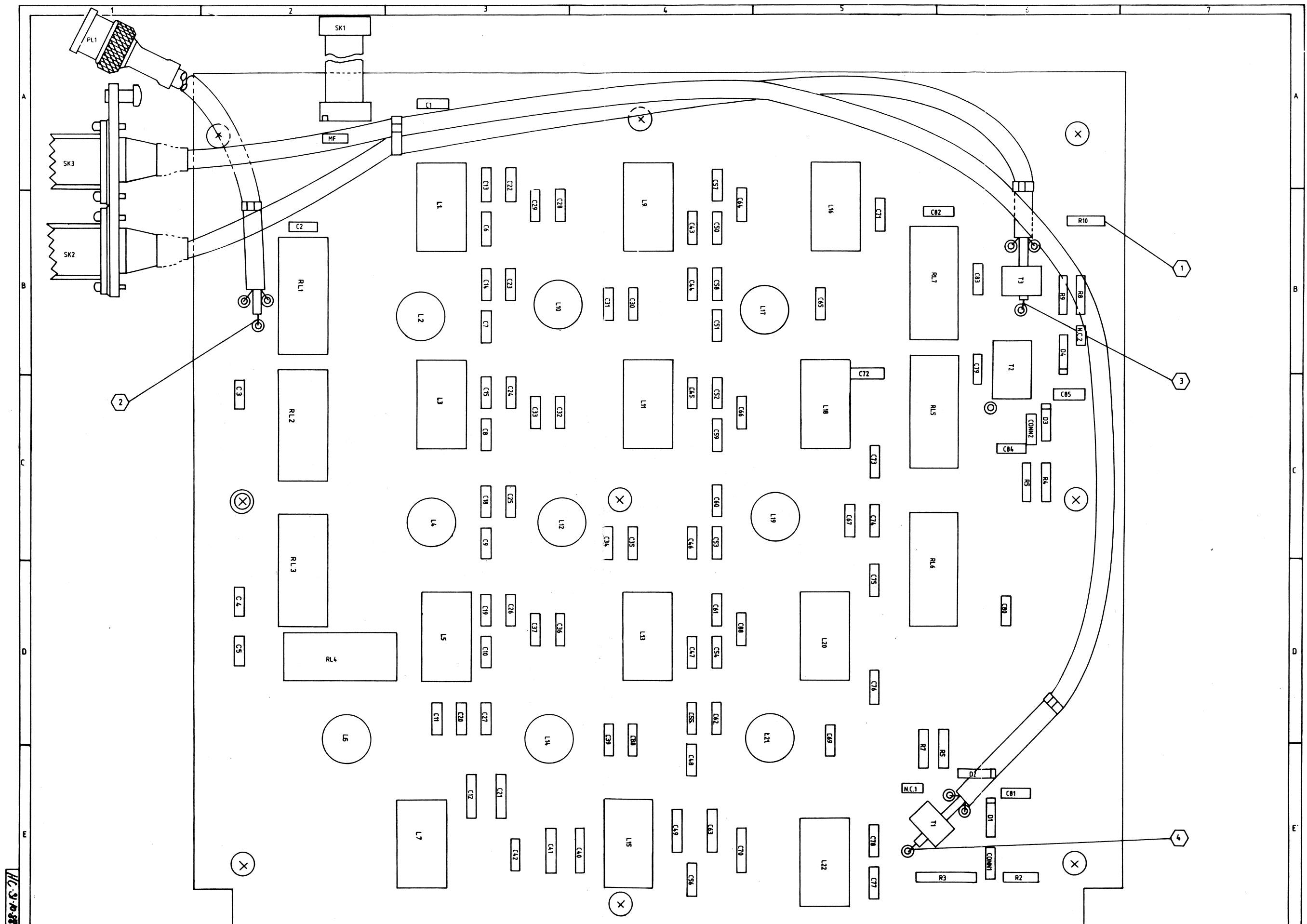
| Filter no. | Passband MHz | Stopband MHz | Relays | | |
|------------|--------------|--------------|--------|---|---|
| | | | A | B | C |
| 1 | 1.60- 2.31 | 3.19 | 0 | 1 | 0 |
| 2 | 2.31- 3.33 | 4.61 | 1 | 1 | 1 |
| 3 | 3.33- 4.80 | 6.64 | 1 | 0 | 0 |
| 5 | 6.20- 8.95 | 12.40 | 1 | 1 | 0 |
| 6 | 12.23-17.65 | 24.40 | 0 | 1 | 1 |
| 8 | 18.78-27.10 | 37.45 | 0 | 0 | 0 |

0 = off
1 = on

All filters are 5th order elliptic LP-filters (cauer-filters) with a series coil giving an inductive input impedance on the harmonics. When loaded with 50 ohms the input SWR is less than 1:1.1 and the insertion loss less than 0.2 dB in the passbands. In the stopbands the attenuation is better than 25 dB. The filters are inserted by a system of dual-pole dual-throw Relays controlled from the Transceiver Control Board **624** as shown in the table. Other types of filter banks are available, and the microprocessor selects the corresponding switch pattern by sensing the type code information on 4 lines of the connector cable. If the cable is disconnected filter no. 8 is chosen, so that transmission is possible on all frequencies in case of fault in the switching system. The DC voltage from the output peak-detector, which monitors voltage and current in the load, is connected to the ALC-circuit on the Transceiver Control Board **624**. This voltage is used for automatic adjustment of output power and should be 9.0 V for an output of 250 W into 50 ohms.



PCB 627 628 636 638
P.A. FILTERS BOARD MARINE BANDS
VERSION 1A. MAIN DIAGRAM.



993 562 7X COMP
 993 562 8X COMP
 993 563 6X COMP
 993 563 8X COMP

PCB 627 628 630 638 VERSION 1A
 P.A. FILTERS BOARD MARINE BANDS
 VIEWED FROM COMPONENT SIDE

TEST POINTS FOR PCB 627 628 P.A. FILTERS.

Self test #

33

35

36

37

39

41 (628 ONLY)

1

9VDC

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2

~ 320Vpp

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3

~ 320Vpp

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