J98726BA-5, L5 DPO CHANNEL UNIT D4CD101

DATA SHEET

D4 CHANNEL BANK

The 2-wire, 900-ohm Dial Pulse Originating (DPO) channel unit (J98726BA-5, L5) provides the interface between a D4 channel bank or SLC* -96 carrier system terminal and a 2-wire dial pulse originating circuit. It employs loop supervision (loop closures and reverse battery) and dial pulse or multifrequency pulse signaling. For signaling and supervision, it converts loop closures from the trunk circuit into pulses for the digital network. Similar pulses from the digital network are converted into normal and reverse battery condition for the trunk circuit.

* Trademark of Western Electric

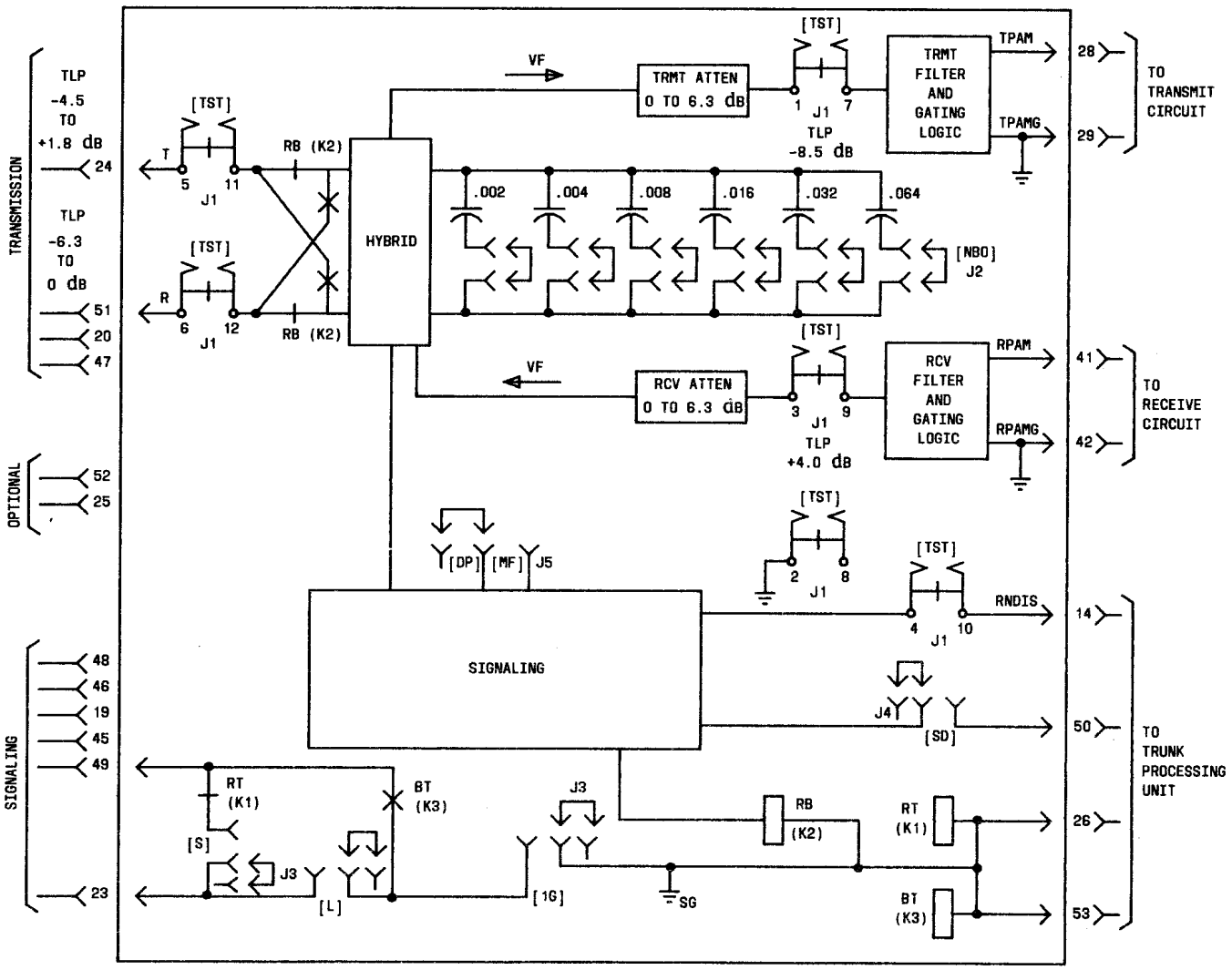

Fig. 1—J98726BA-5 Block Diagram

This section is reissued to correct minor errors in the original data sheet.

The transmission circuitry of this unit contains a hybrid for 2- to 4-wire conversion, 0 to 6.3 dB attenuators, and network build-out circuitry.

For detail, see CD- and SD-3C322-03 and Section 365-170-110. Section 855-351-105 gives prescription (option) settings and application information.

Figure 1 is a functional block diagram of the unit, and Fig. 2 gives major component location and option information.

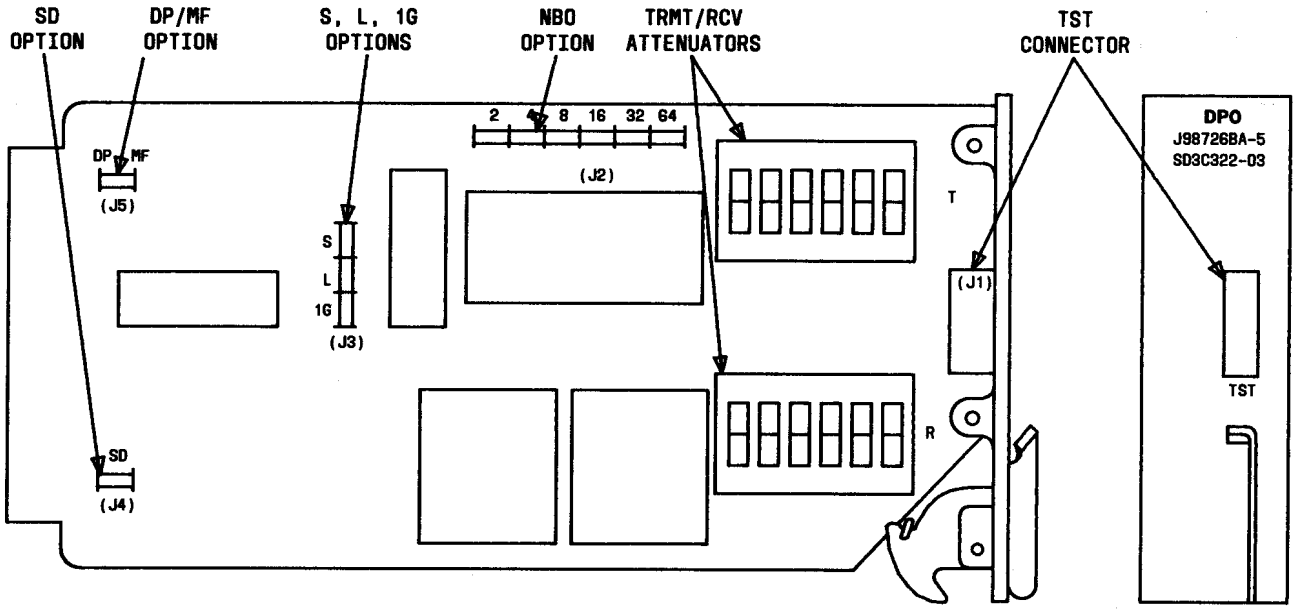

Fig. 2—J98726BA-5 Component Layout

TST CONNECTOR: Insertion of a test card into this connector provides splitting access to the drop side of the hybrid, the TRMT TLP, the RCV TLP, and the RNDIS lead for test and maintenance purposes.

TRMT AND RCV ATTENUATORS: Switches on these attenuators provide from 0 to 6.3 dB of attenuation in the transmit and/or receive transmission paths in steps of 0.1 dB. Attenuation is inserted into the transmission path by depressing the switch rocker arm. The total attenuation in dB is determined by adding the values adjacent to each of the depressed rocker switches. In later manufactured channel units, the Type 60A attenuator will be replaced by a functionally equivalent, Type 70A attenuator.

NBO OPTIONS: The NBO (network build-out) options are used to balance office wiring capacitance, and are set to the value prescribed for the office. (See Section 855-351-105.) Each NBO option is associated with a capacitor value (0.002, 0.004, 0.008, 0.016, 0.032, 0.064 μF) that can be connected into the circuit by a jumper plug. The selection and manual setting instructions for the NBO network options are given in Section 365-170-000 (TOP).

S, L 1G OPTIONS: Options 1G and S are selected when the channel unit is used with a step-by-step office to split the S lead from an outgoing trunk circuit and ground the switch side of the S lead during a carrier failure. Option L is selected when a dry contact closure is required during a carrier failure. Option 1G is selected when an internally supplied ground is desired during a carrier failure. The options are selected by inserting jumper plugs into the black side (white side exposed) of J3.

SD OPTION: This option makes the trunk appear busy during a carrier failure by applying a ground to the tip lead. This prevents the trunk from being seized during a failure. The option is selected by inserting a jumper plug to expose the white side of jack J4.

DP/MF OPTION: This option is selected to correspond to the type of signaling employed in the trunk (multifrequency or dial pulsing). Option MF is selected (white exposed) only when the channel unit is used with multifrequency (MF) signaling. Option DP is selected (black exposed) when the channel unit is used with dial pulse (DP) signaling.