

J98726BC-2, L2; BC-3, L3 4E&M CHANNEL UNIT D4CE100

DATA SHEET

D4 CHANNEL BANK

The 4-wire, 600-ohm E and M (4E&M) channel unit (J98726BC) provides an interface between a D4 channel bank or SLC* -96 carrier system terminal and a

4-wire, 600-ohm E and M circuit. The channel unit provides; (1) impedance and level conversion at voice frequencies (VF), (2) E and M signaling and supervision (Types I, II, and III interface), (3) jack access for system measurements and analysis, and (4) trunk processing in response to carrier failure.

* Trademark of Western Electric

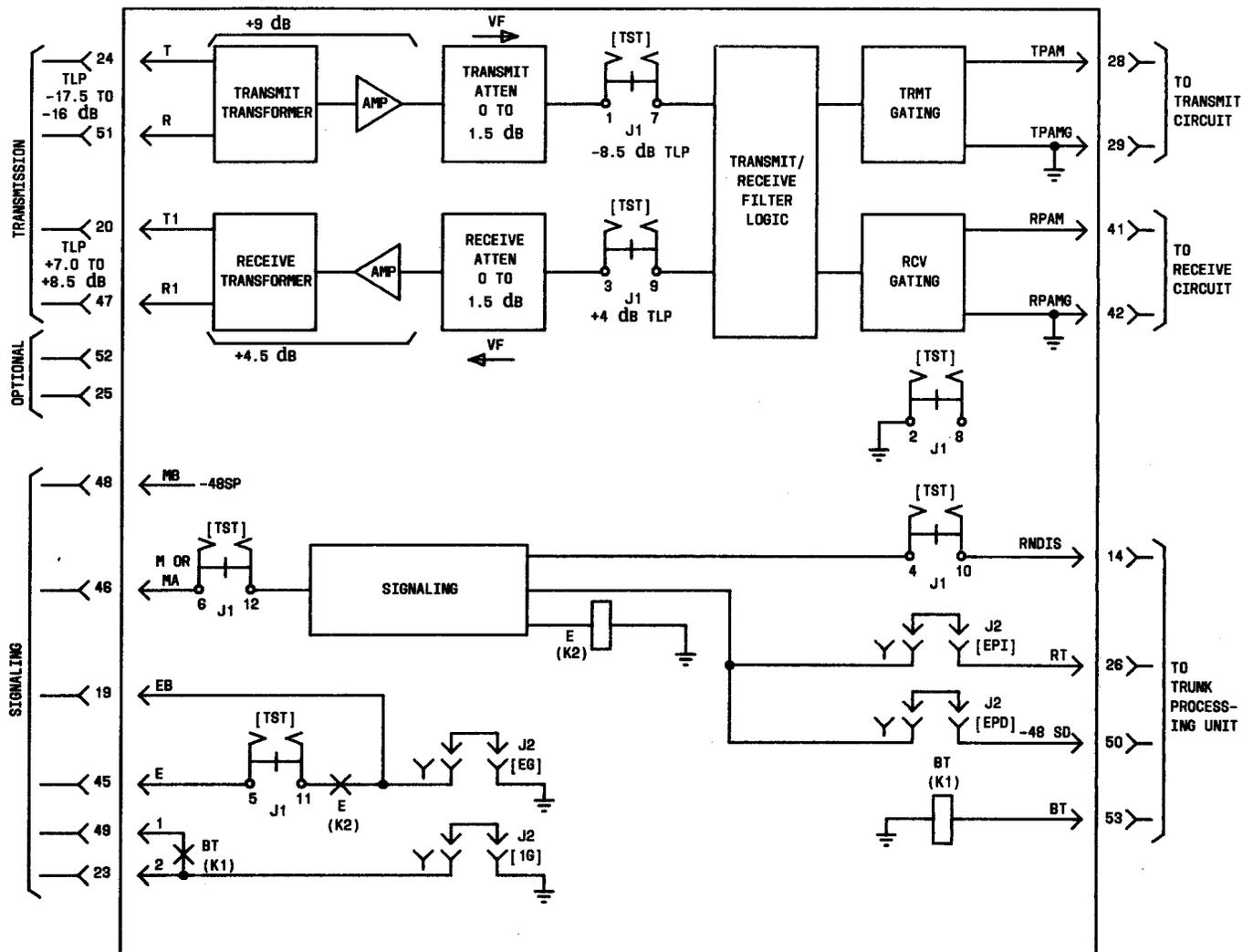


Fig. 1—J98726BC-2, -3 Block Diagram

NOTICE

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SECTION 365-005-003

This section is reissued to include the L3 version of the channel unit.

The transmission circuitry of this unit contains transformers, amplifiers, and 0 to 1.5 dB attenuators.

For detail, see CD- and SD-3C324-02, -03 and Section 365-170-111. 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.

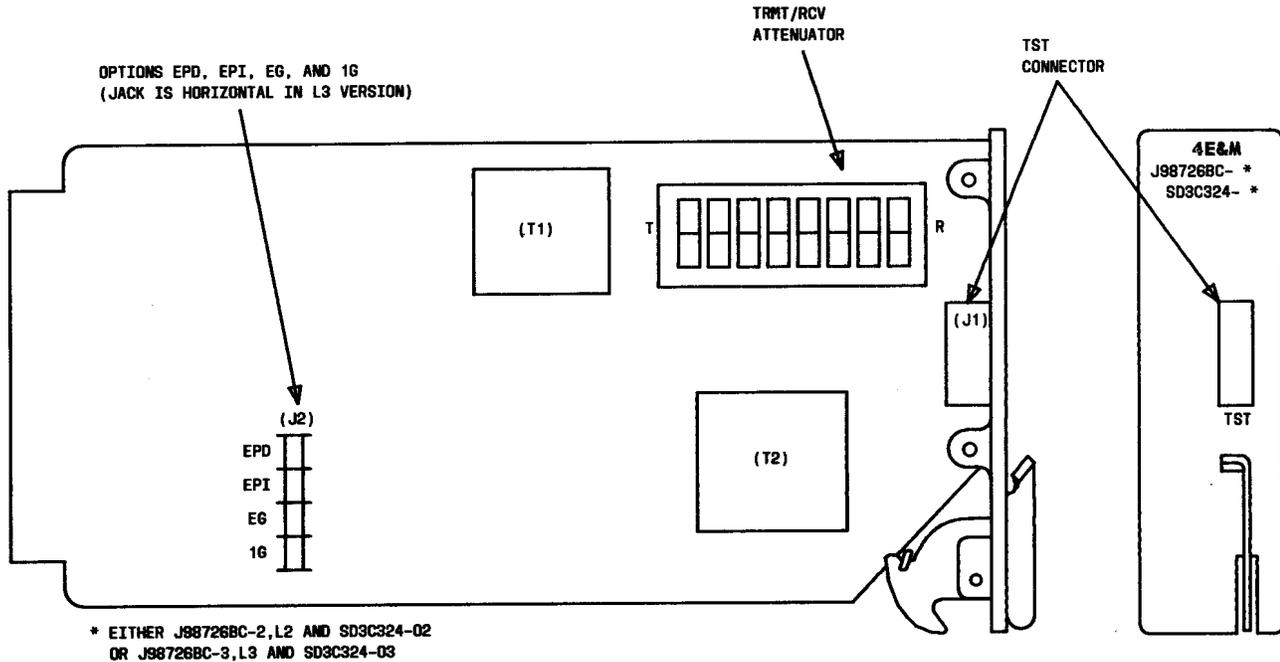


Fig. 2—J98726BC-2, -3 Component Layout

TST CONNECTOR: Insertion of a test card into this connector provides splitting access to the M lead, the E lead, the TRMT TLP, and the RCV TLP for test and maintenance purposes. Insertion also opens the RNDIS lead and re-enables transmission if it has been disabled by TRU operation.

TRMT AND RCV ATTENUATORS: Rocker switches on the transmit/receive attenuator provide 0 to 1.5 dB of attenuation in the transmit and/or receive transmission paths in steps of 0.1 dB. The left side of the attenuator is dedicated to the transmit path and the right side is dedicated to the receive path. These switches are set to obtain the required transmission level at the TRMT and RCV TLP test terminals (-8.5 dB and +4.0 dB respectively). The amount of attenuation is determined by adding the values of the switches set toward the IN position.

1G OPTION: This option provides a ground on the 1 lead (make-busy lead) when trunk processing is initiated. After a 2.5 second delay, the ground disconnects for 100 milliseconds and then reconnects for the duration of the carrier failure. This option is normally selected (white showing) for use with all electromechanical switch machines except No. 5 crossbar.

EG OPTION: This option provides a local ground to the E lead to indicate an off-hook state. It is selected (white showing) for type I interface (standard, for electromechanical switching systems) or type III interface (partially looped, for some electronic switching machines). The EG option is not selected (black showing) for type II interface (completely looped, electronic switching) because the trunk circuit supplies the ground.

EPD OPTION: This option causes the channel unit to open the E lead when trunk processing begins and then grounds the E lead after a 2.5 second delay. It is normally selected (white showing) when make busy leads are not available at the originating end of a 1-way trunk or at either end of a 2-way trunk.

EPI OPTION: This option causes the channel unit to ground the E lead immediately when trunk processing occurs. Supplying an immediate E lead ground to a dial-long-line circuit can suppress erratic ringing at the subscriber end. When neither the EPD nor EPI option is selected, the E lead opens when trunk processing occurs.