

L MULTIPLEX TERMINALS
COMMON EQUIPMENT
SUPERGROUP CONNECTORS
C1- and C2-TYPE—DESCRIPTION

1. GENERAL

1.001 This addendum supplements Section 356-025-100, Issue 4.

1.002 This addendum is issued to add a note to 2.17.

1.003 The following change applies to Part 2 of this section:

2.17—Note added.

1.004 The attached pages must be inserted in the section in accordance with the filing instructions above.

Attached:

Page 9 dated October 1973, reissued
Page 10 dated October 1973, revised

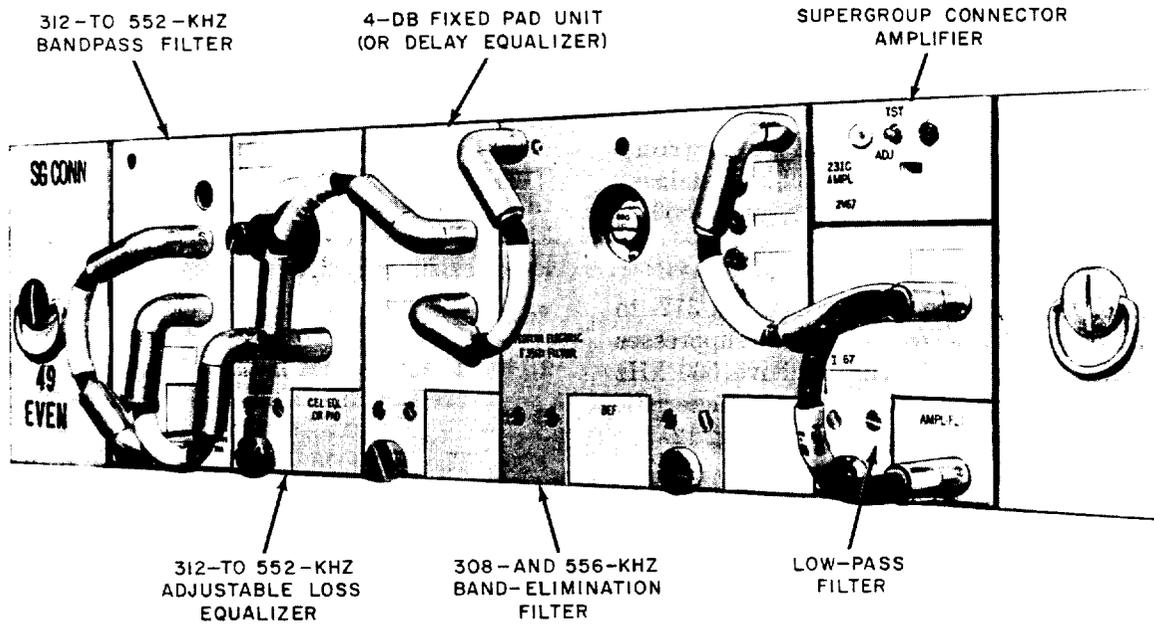


Fig. 9—J68858 C2B Supergroup Connector with Loss Equalizer and Pad Modules

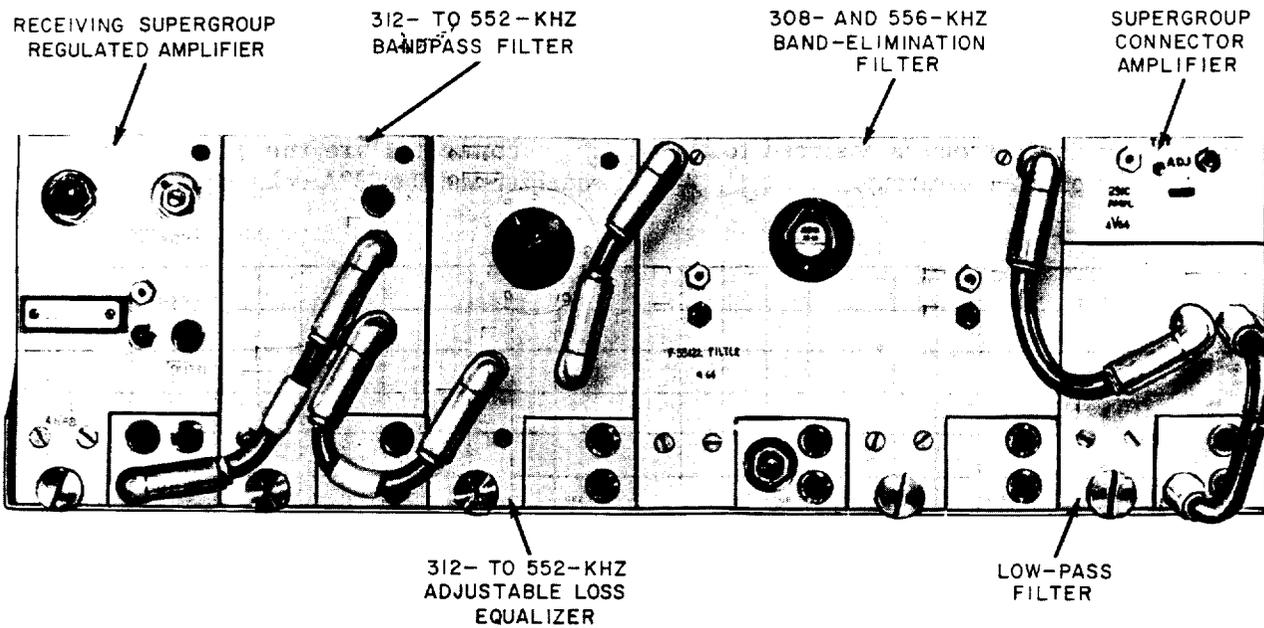


Fig. 10—J68858 C2C Supergroup Connector

2.14 The typical loss characteristic of the C2 supergroup connector is shown in Fig. 11.

Filters

2.15 The filters used in the C2 supergroup connector circuit consist of a 680A bandpass filter, a 629A band-elimination filter, and a 592A low-pass filter.

2.16 The 680A bandpass filter passes the 312- to 552-kHz basic supergroup band and suppresses any frequencies below 304 kHz or above 560 kHz by at least 75 dB. The insertion loss characteristic of the 680A bandpass filter is shown in Fig. 12.

2.17 The 629A band-elimination filter is used to remove two frequencies, 308 kHz and 556 kHz, which are present in certain applications of the supergroup connector when used with the L1-L3 carrier systems. Stability of the filter is achieved by means of quartz-crystal units operating in a temperature-controlled oven that requires 24 volts direct current for operation. The filter suppresses the 308- and 556-kHz frequencies by at least 50 dB in order to prevent interaction between line pilots of the connected systems. The typical loss

◆**Note:** Earlier vintage C2 supergroup connectors may use an F-55122 (SD-50242-01, option X—now rated MD) instead of a 629A band-elimination filter (option W). The F-55122 filter contains “holes” in the frequency spectrum; therefore, it should *not* be used if group-band data service is assigned to the Group-3 slot of the supergroup.◆

characteristic of the 629A filter at 308 kHz and 556 kHz is shown in Fig. 13.

2.18 The 592A low-pass filter prevents high-frequency noise and harmonics generated in the 231C amplifier from being transmitted by the connector circuit to the supergroup modulator circuit. The filter has a cutoff frequency of approximately 600 kHz. The insertion loss characteristic of the 592A low-pass filter is shown in Fig. 14.

Pads

2.19 The pads used in the C2 supergroup connector are the ED-50162-30 G1 and the 512D.

2.20 The ED-50162-30 G1 pad is a resistive unit with a fixed loss of 7.5 dB. It is used to maintain the correct transmission loss through the supergroup connector when delay equalization or amplitude equalization is not required. This pad simulates the loss of the 921A (or 940A) loss equalizer plus the 512D pad or the 921A (or 940A) loss equalizer plus the 932A delay equalizer.

Note: The ED-50162-30 G1 pad is now rated Manufacture Discontinued.

2.21 The 512D pad is a resistive unit with a fixed loss of 4.0 dB. It is used in conjunction with the 921A (or 940A) loss equalizer when delay equalization is not required.

Equalizers

2.22 The equalizers used in the C2 supergroup connector are the 921A (or 940A) loss equalizer and the 932A delay equalizer.

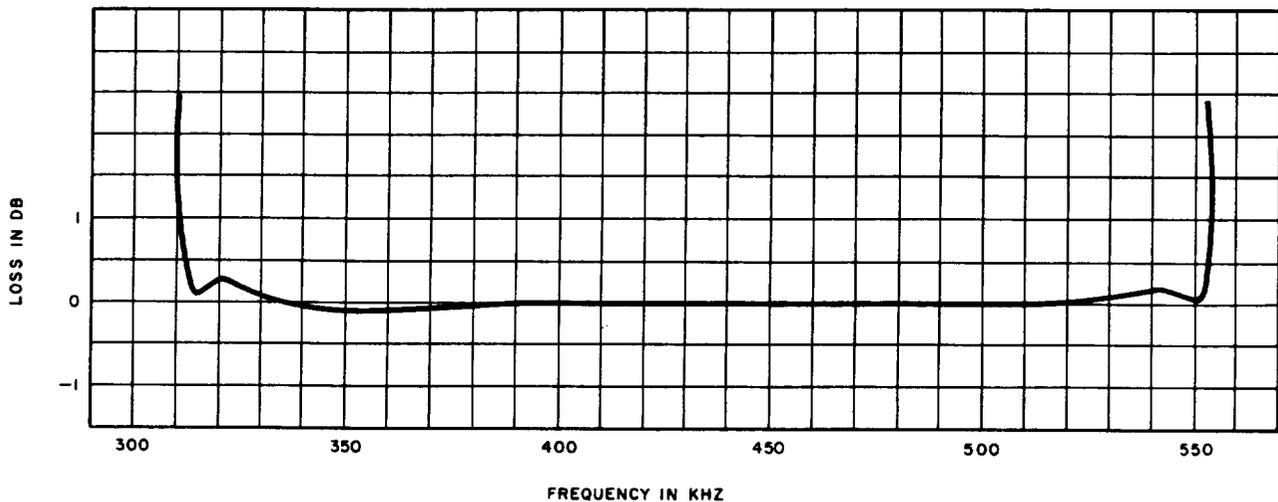


Fig. 11—C2 Supergroup Connector—Typical Loss Characteristic