

SOUND-IN-SYNCS BAND-STOP AND PRE-EMPHASIS FILTER FL1/32

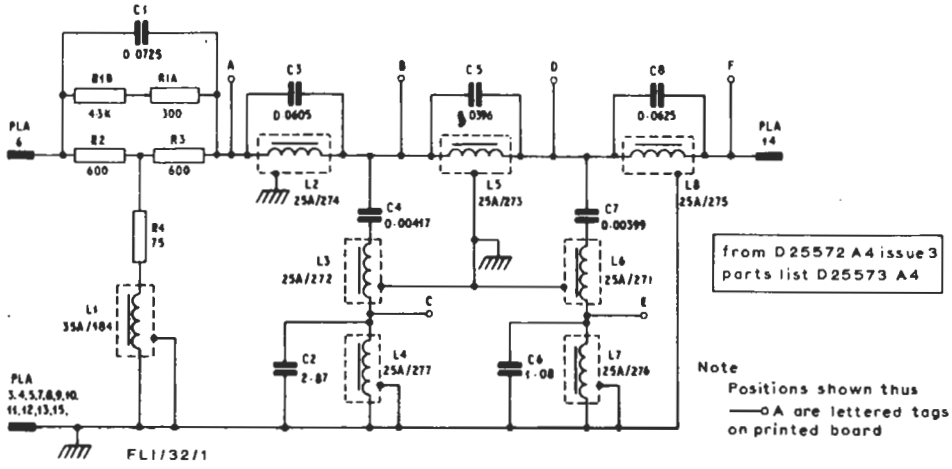


Fig. 1 Circuit of the FL1/32

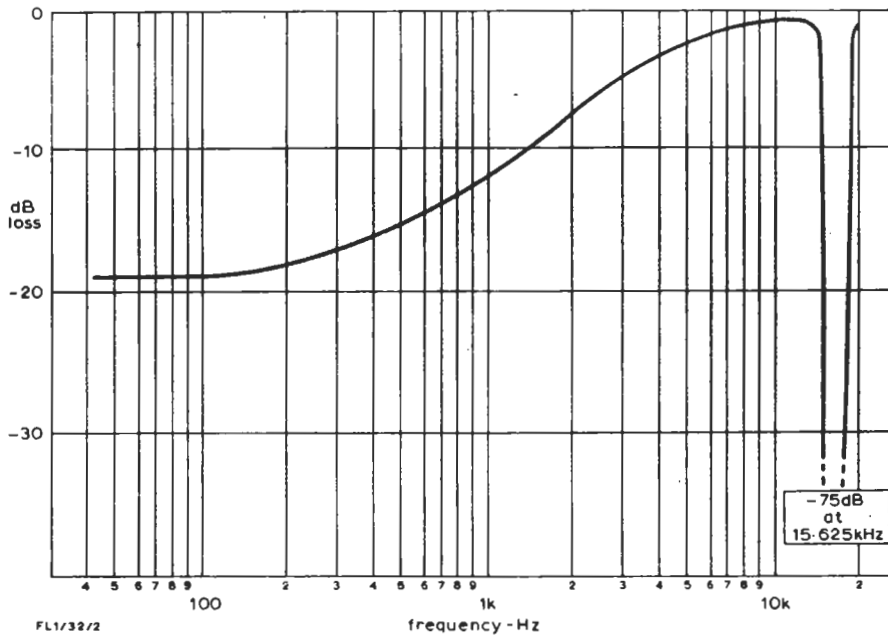


Fig. 2 Typical Response Curve of the FL1/32

Introduction

The FL1/32 forms part of a sound-in-syncs coder¹. The unit accepts an audio signal; this is applied first to a pre-emphasis network and then to a band-stop filter. The filter removes a band of frequencies centred on 15.625 kHz from the signal so that pilot tone at this frequency can be added to the signal in a subsequent unit².

A circuit of the FL1/32 is given in Fig. 1 and a filter-response curve is given in Fig. 2.

General Specification

Input and Output Impedances 600 ohms unbalanced
Basic Loss about 1 dB at 10 kHz
Pre-emphasis Characteristic
 Rejection at 15.625 kHz more than 75 dB
 -3 dB Point 14.2 kHz

Maintenance

In the event of faults, the resonance frequencies of individual sections of the FL1/32 can be checked by applying tone at 15.625 kHz to the suspect section and monitoring at the appropriate point with an amplifier-detector such as the ATM/1. The injection and monitoring points are given in Table 1.

TABLE 1

<i>Inject at Tag</i>	<i>Tune for Max/Min. Response</i>	<i>Detect at Tag</i>
A	L2 for min.	B
B	L3 for max.	C
C	L4 for max.	C
B	L5 for min.	D
D	L6 for max.	E
E	L7 for max.	E
D	L8 for min.	F

On completion of adjustments apply a locking compound to the inductor cores.

References to Typical Associated Equipment

1. Sound-in-syncs Coder CD2M/505
2. Sound-in-syncs Audio Limiter AM6/9

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