

Fig. 7

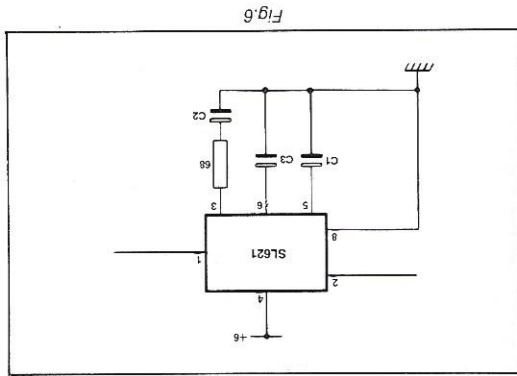
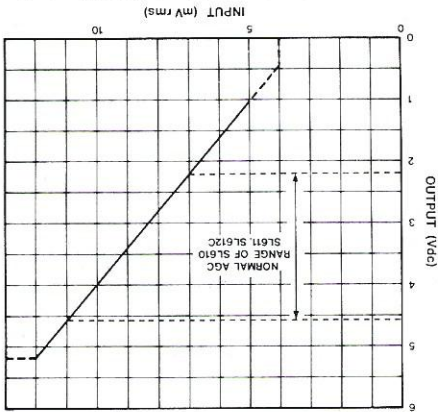


Fig. 6

Fig. 5 Transfer characteristic of SL621C (typical)



In a receiver for both AM and SSB using an SL623C detector/carrier AGC generator, the AGC outputs of the SL621C and SL623C may be connected together provided that no audio reaches the SL621C input while the SL623C AGC lines may require some RF decoupling but the total capacitance on the output should not exceed 1500pF or the impulse suppression will suffer.

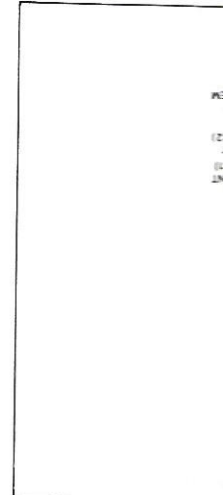
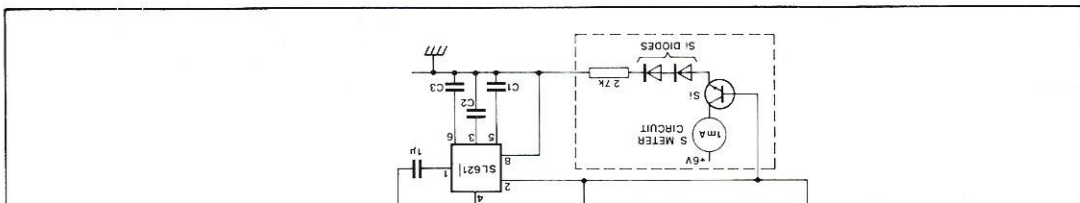
Under some conditions, overload of the AGC output may occur in a receiver. Possible solutions are shown in Figs. 6 and 7.

Fig. 3 shows how a noise burst superimposed on speech will initiate rapid AGC action via the short time constant detector while the long time constant detector effectively remembers the pre-noise AGC level. The various time constants quoted are for $C_1 = 50\mu\text{F}$ and $C_2 = C_3 = 100\mu\text{F}$. These time constants may be altered by varying the appropriate capacitors. C_1 controls t_1 , t_2 ; C_2 controls t_3 , t_4 ; C_3 controls t_5 . The supply must either have a source resistance of less than 2Ω at LF or be decoupled by at least $500\mu\text{F}$ so that it is not affected by the current surge resulting from a sudden input on pin 1.

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Under some conditions, overload of the AGC output may occur in a receiver. Possible solutions are shown in Figs. 6 and 7.

Fig. 4 SL621C used to control SSB receiver



can decay at a maximum receiver gain of 20dB/s. smoothly follow signals than this, or disappear speech, then the input to the 4mV rms threshold ver. However should the w. As C_2 then has no (and hence the output zero in time t_2 after the C_3 . When the trigger after t_5 C_2 is discharged receiver gain is restored. The second with $C_3 = 100\mu\text{F}$.

output open circuit full output 36% full output 0% full output output transition point