SUPPRESSION PULSE GENERATOR GE3/502 AND GE3/502A

Introduction

The GE3/502 and GE3/502A are suppression pulse generators designed to produce a field pulse with a preset delay with respect to the leading edge of field syncs. There are no operational controls.

The generator is built on to a printed circuit board, approximately $3\frac{7}{8}$ in. $\times$ $1\frac{5}{8}$ in. It is intended for mounting as part of a parent unit, e.g. MN1/505 or MN1/508, from which it draws its supplies. The GE3/502 is for 625-line working and the GE3/502A for 405 lines.

General Specification

Input Field Pulses	13V p-p positive going
Input Impedance	10 kilohms resistive
Output Pulse (unloaded)	12V p-p
Output Pulse duration	
625 lines	230μs (3·5 lines)
405 lines	560μs (5·5 lines)
Output Impedance	
No Input Signal	220 kilohms
During Input Signal	very low
Operating Temperature Range	20° C–45° C
Power Requirements	12V 1·5mA
Weight	1 oz. approx.

Circuit Description

The circuit diagram is given in Fig. 1. TR1 provides a high impedance input to the unit. TR2 is normally cut off, conducting only during the pulse period. C2 removes the h.f. components and C3/R5 differentiates the pulses which then trigger the monostable multivibrator TR3/TR4. The pulse from TR4 is differentiated by C7/R14 and the trailing edge triggers the monostable TR5/TR6. The positive-going pulse from TR6 is inverted by TR7. TR7 acts as a switch effectively short-circuiting the output terminal B to earth during the pulse period.

Maintenance

Routine maintenance is not required but an occasional check should be made to ensure that the output pulses are to specification.

Reference

1. Designs Department Specification No. 11.80(69).

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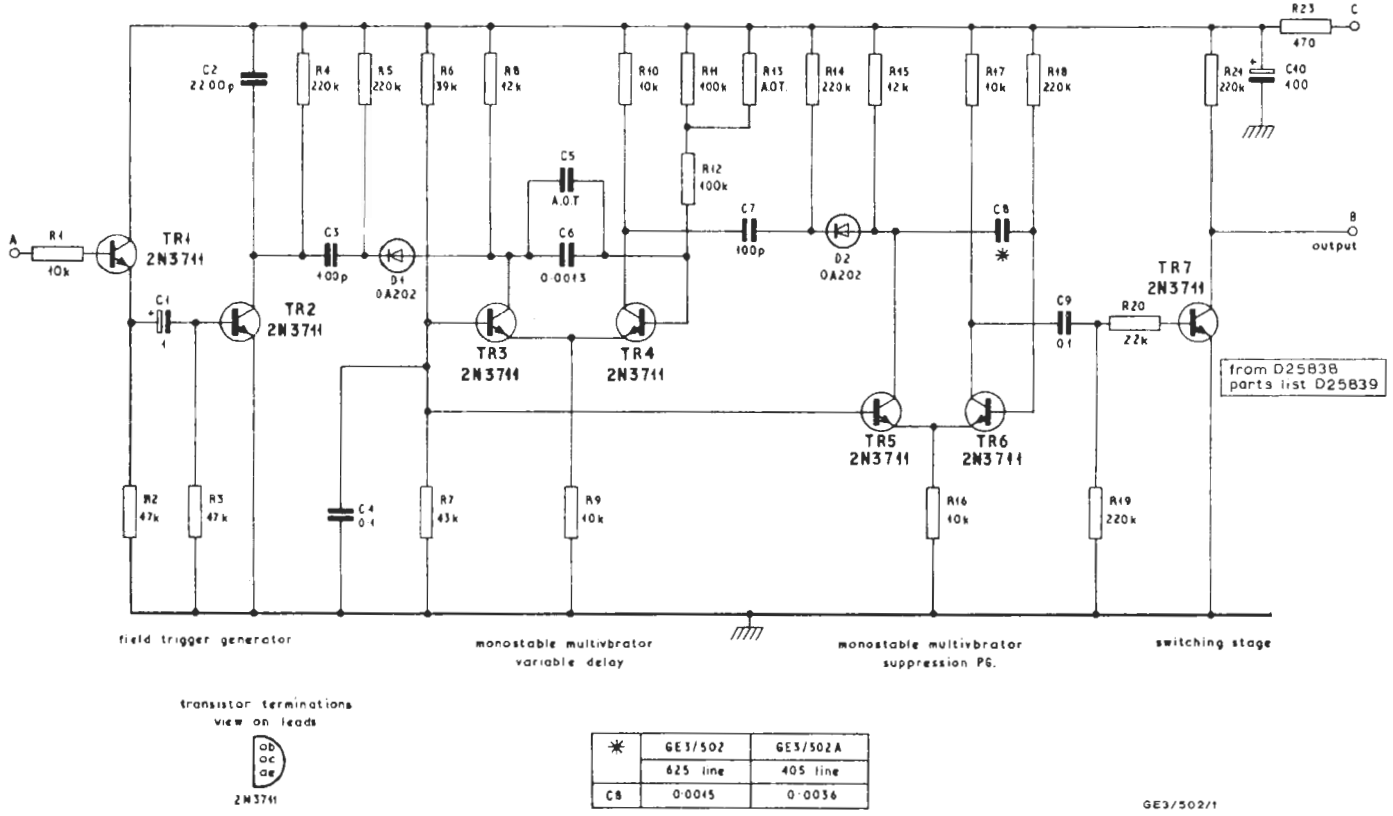

*	GE3/502	GE3/502A
	625 line	405 line
C8	0·0015	0·0036

Fig.1 Circuit of the Suppression-pulse Generator GE3/502