

AUDIBLE TONE GENERATORS GE1/8A AND GE1/8B

General

The generator GE1/8 is a subunit originally used with Type-D sound-control equipment, for example in telephone panels such as the PA8/309 and PA8/310. It produces an audible tone with a frequency of about 3.5 kHz from the A version and about 2.8 kHz from the B version.

The unit is constructed from a printed circuit card with dimensions of $1\frac{3}{4}$ by $1\frac{3}{8}$ inches, mounted on the terminals of a bleepone unit. The generator is mounted on a suitable panel drilled to permit the passage of sound.

If the unit is totally enclosed care must be taken to ensure that there is no undue restriction of the passage of air from the bleepone which might otherwise be damaged.

Circuit Description (Fig. 1)

The bleepone WD1 is switched by transistor TR1, which is normally cut off by R1 between base and emitter. Connection of the 50-volt negative supply through a resistor of 100 kilohms to the base will switch the transistor on and cause the bleepone to sound. Variation of the voltage across the bleepone varies the frequency it emits, and this variation is achieved by varying the capacitor C1.

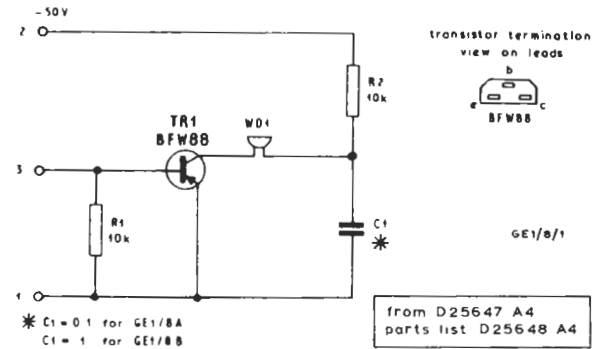


Fig. 1. Circuit of the GE1/8A and GE1/8B

Test Procedure

1. Connect a 50-volt supply to terminals 1 and 2 (negative to 2).
2. Connect a 100-kilohm resistor between terminals 2 and 3. The generator should emit a tone of a single frequency. A faulty unit may emit a twin-frequency note.

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