

orban

FIELD ENGINEERING BULLETIN

July 30, 2001

Orban models: 2200, 8101B, 8182ASAP, 8185A, 8200, 8208, 8218

Replacing the LT1010

The LT1010CH Power Buffer has been discontinued by Linear Technologies. This component is used in several different Orban products, some which are still in production. Due to the obsolescence of the LT1010, a replacement component must be used. Unfortunately there are no known pin-compatible packages that satisfy the functional requirements. The BUF634T manufactured by Burr-Brown is an electronically suitable replacement device. The LT1010CH device uses a TO-39, 4-pin “can” package, whereas the BUF634T comes in a TO-220, 5-pin package.

Figure 1 shows the pin configuration for the LT1010CH (Orban part number 24707.102.01).

Figure 2 shows the pin configuration for the Burr-Brown BUF634T device (Orban part number 24026.000.01).

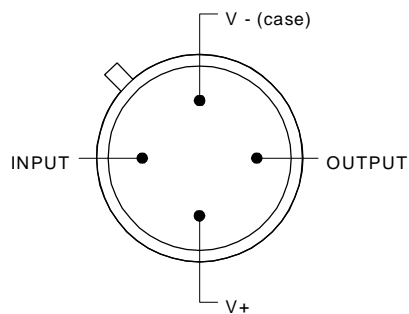


Figure 1: LT1010CH pinout (top view)

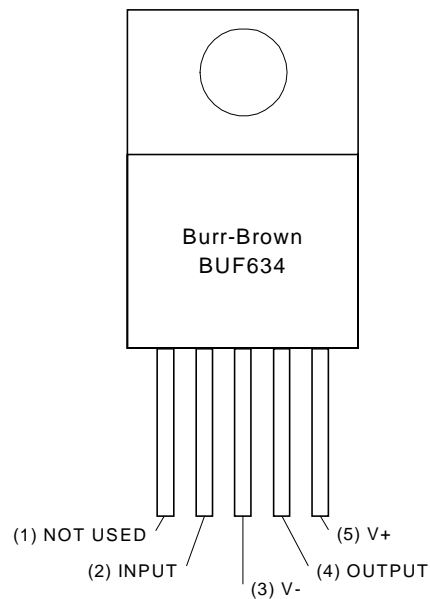


Figure 2: BUF634T pinout (front view)

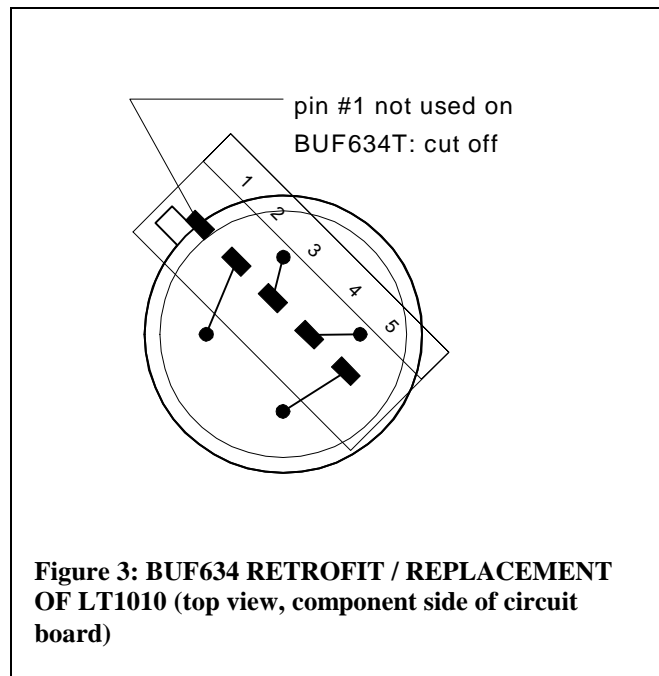
Because the pin configurations are not the same for the two devices, it is necessary to re-form the leads of the BUF634T to match the printed circuit board pad configuration of the LT1010CH. (continued on next page).

Pin #1 (bandwidth compensation) of the BUF634T is not used, and should be cut close to the body of the device to prevent short circuits, or other undesired behavior.

Carefully form the pins as shown in Figure 3:

LT1010 pin name	BUF634T pin# / name
INPUT	2 / INPUT
V -	3 / V -
OUTPUT	4 / OUTPUT
V +	5 / V +

Carefully inspect the formed leads for short circuits. Also make sure that the pins of the BUF634T pass through the circuit board holes perpendicular to the plane of the board, to prevent damage to the circuit board traces. Solder in place only with a low wattage soldering iron. Be sure that the metal tab of the BUF634T does not touch any other component. A heatsink is used on the LT1010 in some models. It is unnecessary with the BUF634T and may be discarded.



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