

Telephone circuits

Speech transmission circuits

Following applies to all speech transmission circuits. Special features are given separately for each circuit.

- Easy adaption to all specifications with few external components.
- Wide minimum and maximum line current range.
- DC - characteristic that allows a good parallel operation of telephones.
- Disconnectable line loss compensation for receiver and transmitter gains.
- Balanced in- and outputs for microphone and receiver, in general.
- All AC - signal paths are related to ground (-line).
- General mute function.
- All circuits with two unregulated supplies. Plus specific DC - supplies.
- All circuits in bipolar process, hence good radio interference suppression (RFI) and noise performance.

Old circuits outside this shortform are in production and available.

Part Number	Features	Package
PBL 3726/16	• Sidetone regulation with line length	18-pin DIP 20-pin SO
PBL3726/18	• Two stabilized DC-supplies • Separate DTMF and microphone inputs	18-pin DIP 20-pin SO
PBL 3781/02	• Low voltage: Operates down to 1.3 V DC	16-pin batw. DIP 20pin SO
PBL 3783	• Low voltage: operates down to 1.3 V DC • Lower transmitter gain than PBL 3781/02	16-pin batw. DIP 20-pin SO
PBL 3852	• Two stabilized DC-supplies. One of them special for handsfree circuits • Softclipping	18-pin DIP 20-pin SO
PBL 385 41	• Two stabilized DC-supplies. One of them special for handsfree circuits • 6 mA constant current supply for line powered auxiliary functions • Separate DTMF and microphone inputs	18-pin DIP 20-pin SO
PBL 385 42	• Three stabilized DC-supplies. One of them special for handsfree circuits • 6 mA constant current supply for line powered auxiliary functions • Separate DTMF and microphone inputs	20-pin SO
PBL 3853	• Special circuit for payphones and other telephone applications that need a high DC - current supply from the line for auxiliary functions • Unbalanced receiver output • Separate mute for transmitter and receiver	18-pin DIP 20-pin SO
PBL 385 70	• Pin to pin compatible replacement for PBL 3726/18	18-pin DIP 20-pin SO
PBL 385 71	• Minimum function	16-pin batw. DIP 16-pin batw. SO
PBL 385 73	• Minimum package solution for specified low line current need	14pin DIP 14-pin SO