

# 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	<ul style="list-style-type: none"> <li>• Sidetone regulation with line length</li> </ul>	18-pin DIP 20-pin SO
PBL3726/18	<ul style="list-style-type: none"> <li>• Two stabilized DC-supplies</li> <li>• Separate DTMF and microphone inputs</li> </ul>	18-pin DIP 20-pin SO
PBL 3781/02	<ul style="list-style-type: none"> <li>• Low voltage: Operates down to 1.3 V DC</li> </ul>	16-pin batw. DIP 20pin SO
PBL 3783	<ul style="list-style-type: none"> <li>• Low voltage: operates down to 1.3 V DC</li> <li>• Lower transmitter gain than PBL 3781/02</li> </ul>	16-pin batw. DIP 20-pin SO
PBL 3852	<ul style="list-style-type: none"> <li>• Two stabilized DC-supplies. One of them special for handsfree circuits</li> <li>• Softclipping</li> </ul>	18-pin DIP 20-pin SO
PBL 385 41	<ul style="list-style-type: none"> <li>• Two stabilized DC-supplies. One of them special for handsfree circuits</li> <li>• 6 mA constant current supply for line powered auxiliary functions</li> <li>• Separate DTMF and microphone inputs</li> </ul>	18-pin DIP 20-pin SO
PBL 385 42	<ul style="list-style-type: none"> <li>• Three stabilized DC-supplies. One of them special for handsfree circuits</li> <li>• 6 mA constant current supply for line powered auxiliary functions</li> <li>• Separate DTMF and microphone inputs</li> </ul>	20-pin SO
PBL 3853	<ul style="list-style-type: none"> <li>• Special circuit for payphones and other telephone applications that need a high DC - current supply from the line for auxiliary functions</li> <li>• Unbalanced receiver output</li> <li>• Separate mute for transmitter and receiver</li> </ul>	18-pin DIP 20-pin SO
PBL 385 70	<ul style="list-style-type: none"> <li>• Pin to pin compatible replacement for PBL 3726/18</li> </ul>	18-pin DIP 20-pin SO
PBL 385 71	<ul style="list-style-type: none"> <li>• Minimum function</li> </ul>	16-pin batw. DIP 16-pin batw. SO
PBL 385 73	<ul style="list-style-type: none"> <li>• Minimum package solution for specified low line current need</li> </ul>	14pin DIP 14-pin SO