



LM6113/LM6214/LM6314 High Speed Op Amp Plus Power Buffer

General Description

The LM6113 family is a combined high speed op amp and power buffer. The op amp features a 40 MHz small signal bandwidth, and a fast 240V/ μ s slew rate. A compensation pin is included for altering the open loop bandwidth and slew rate if desired. The op amp and buffer are pinned out separately, and can be used independently or in combination. The buffer has a 50 MHz small signal bandwidth and slews at 700V/ μ s into a 50 Ω load and can deliver \pm 300 mA output current. The buffer includes protection in the form of current limit and thermal shutdown. The 16 pin plastic version, (LM6214/LM6314), has the unique features of electronic shutdown and error flag included.

These amplifiers are built with National's new VIPTM (Vertically Integrated PNP) process which provides fast PNP transistors that are true complements to the already fast NPN devices. This advanced junction-isolated process delivers high speed performance without the need for complex and expensive dielectric isolation.

Features

- Current and thermal limiting
- Op amp and buffer pinned out separately

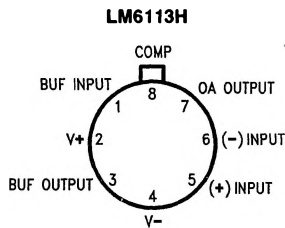
Op Amp

- Wide bandwidth 40 MHz
- High slew rate 240V/ μ s

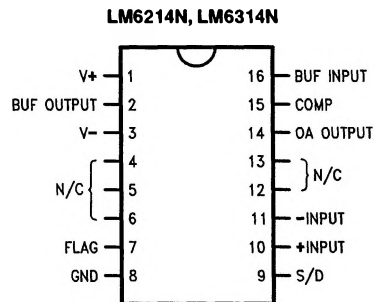
Buffer

- High slew rate (Into 50 Ω) 700V/ μ s
- Wide bandwidth 50 MHz
- Electronic shutdown
- Bi-State Output
- Error flag warns of faults

Connection Diagrams



TL/H/9224-1



TL/H/9224-2

Order Number **LM6113H, LM6214N or LM6314N**
See NS Package Number **H08A or N16A**