

Texas Instruments - Tucson 6730 South Tucson Blvd. Tucson, Arizona 85706 Phone: 520-746-1111

Product Alert

July 3, 2003

Affected Models/Date Codes

OPA349NA/250, OPA349NA/3K: August 2001 and newer OPA349UA, OPA349UA/2K5: February 2001 and newer

OPA349SA/250, OPA349SA/3K: All

Problem Description

Texas Instruments has found a problem with the OPA349 op amp. All packages and grades of the OPA349* are affected. These op amps fail to perform normally or as described in the data sheet. The problem affects the dynamic behavior of the op amp, producing a distorted output and/or oscillations. The behavior is most severe in low gain configurations (G=1 to G=2) and capacitive load (greater than 50pF). The behavior may be present without a signal. Often the behavior only occurs when the op amp is driven with frequencies greater than 5kHz.

Some applications may not be affected. To provide best possible customer service and continued delivery, Texas Instruments will deliver currently available devices after technical consultation and execution of a waiver. Though corrected devices will be available, operation at greater than 70'C is not recommended.

*Dual versions (OPA2349) are not affected.

Cause

A design layout change to improve quiescent current over temperature performance is attributed with adversely affecting operation under the above described conditions.

Corrective Action/Containment

- 1. All TI inventory has been placed on ship hold and product in TI distributor channels is being recalled to the factory.
- 2. TI will correct the design and update specifications for the product family. The OPA349NA/250, OPA349NA/3K, OPA349UA and OPA349UA/2K5 will be available approximately September 30, 2003. Users of the OPA349SA/250 and OPA349SA/3K should consult their local sales contact for availability information.
- 3. Customer applications not affected may continue to purchase existing product by waiver.

Comments/Recommendations

TI recommends customers thoroughly evaluate their designs for proper operation.

Contact Information

To return product, contact your local sales office.

For technical/design assistance only contact Bruce Trump at (520) 746-7347 or email trump bruce@ti.com.

Paul J. Dufour Customer Quality