



### **Features**

- High Slew Rate 2000 V/µs
- Power Bandwidth 2 MHz
- Supply Voltage 450 V (+-225 V)
- High Output Current 200 mA
- Low Iq 25 mA
- Low Noise 3μV/sqrtHz
- Excellent Settling Time 750 ns

## System Examples

- Scanning Electron Microscope
- Lithography System
- Ultrasonic Therapy & Surgical Tools
- Vibration Cancellation
- Heads-Up Display
- Analysis Equipment
- Focused Ion Beam Equipment
- Inspection System
- High Voltage Instrumentation
- Semi-Cap Test System

# PA198DP

## 2000 V/µs, 2 MHz Power Operational Amplifier

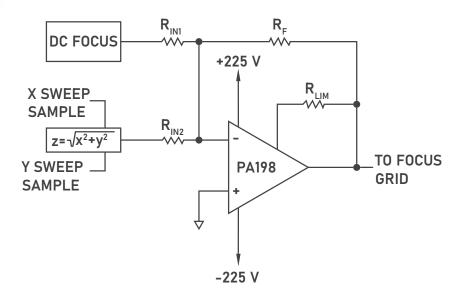
### **Product Overview**

The PA198 is a high voltage, high power bandwidth MOSFET operational amplifier designed for output currents up to 200 mA. Output voltages can swing up to ±215 V with a dual supply and up to +440 V with a single supply. The safe operating area (SOA) has no second breakdown limitations and can be observed with all types of loads by choosing an appropriate current limiting resistor. High accuracy is achieved with a cascode input circuit configuration. All internal biasing is referenced to a bootstrapped zener-MOSFET current source. As a result, the PA198 features a broad supply range and excellent supply rejection. The MOSFET output stage is biased on for linear operation. External compensation provides user flexibility. The PA198 is a hybrid product design housed in a space saving, electrically isolated 12-pin PowerSIP package which lends itself to high-density circuit board layouts.

### Typical Applications

The PA198 is a multi-purpose power operational amplifier, well suited to many applications and markets. Typical applications can include:

- Electrostatic Deflection
- Electromagnetic Deflection
- Piezo Drive
- Voltage and Current Source



## **PA198DP**

2000 V/µs, 2 MHz Power Operational Amplifier

## **Product Specifications - Key Parameters**

Specification Parameter	PA198
Slew Rate	2000 V/μs
Quiescent Current	25 mA
Noise	3 μV/sqrtHz
Settling Time	750 ns
Supply Voltage	450 V (±225 V)
Output Current	200 mA
Power Bandwidth	2 MHz

#### APEX MICROTECHNOLOGY INC.

5980 N Shannon Road Tucson, Arizona 85741 USA T: +1.520.690.8600 F: +1.520.888.3329

### **SALES SUPPORT**

Toll Free: +1.800.862.1032 eMail: custserv@apexanalog.com

### **TECHNICAL SUPPORT**

Toll Free: +1.800.546.2739 eMail: Apex.Support@apexanalog.com

WWW.APEXANALOG.COM

© 2022 Apex Microtechnology, Inc. All rights reserved. Product information subject to change without notice. The Apex Microtechnology logo is a trademark of Apex Microtechnology, Inc.

