



PA107DP

3000V/ μ s, 5A PEAK High Power Bandwidth Amplifier
For Driving Piezo Electronics



12-PIN POWERSIP (STYLE DP)

FEATURES

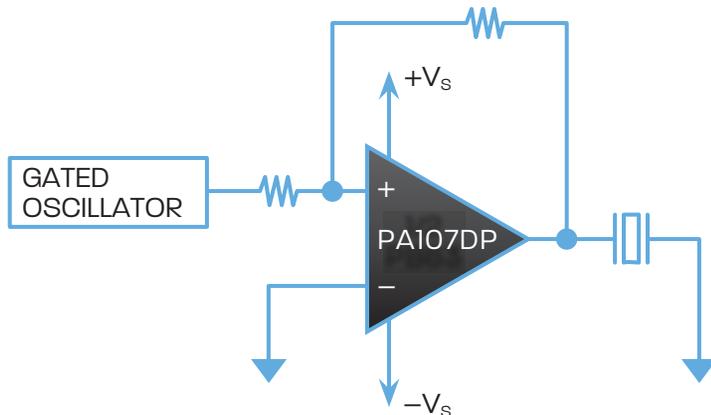
- High slew rate 3000V/ μ s
- High current 1.5A continuous, 5A PEAK
- High voltage operation 40V to 200V dual supply
- High gain bandwidth 180MHz

Product Overview

The PA107DP is the first “off-the-shelf” power operational amplifier to offer an industry first combination of high speed, high voltage, and high current. The PA107DP combines an extremely high slew rate of 3000V/ μ s MAX, with a wide, dual supply voltage operation of 40V to 200V, and output current of 1.5A continuous, or 5A PEAK. This device also features a high gain bandwidth of 180MHz. Housed in a 12-pin PowerSIP package with an option of formed leads (PA107EE), the PA107EE is equally attractive for its very small footprint that can require less than two square inches of board space. A heatsink is required to realize the SOA.

Typical Applications

The PA107DP has been developed specifically to drive the piezo electronics used in medical imaging and ultrasound applications. The amplifier's high speed, or the bandwidth, allows the device to drive voltage within the end system with greater speed and accuracy, enabling imaging equipment to scan faster and power supplies to cycle up with improved efficiency. The PA107DP also deserves consideration in programmable power supplies for industrial applications such as automatic test equipment.



The PA107DP utilizes its unique combination of very high speed and high voltage operation to drive piezos transducers in ultrasonic applications for the medical market.

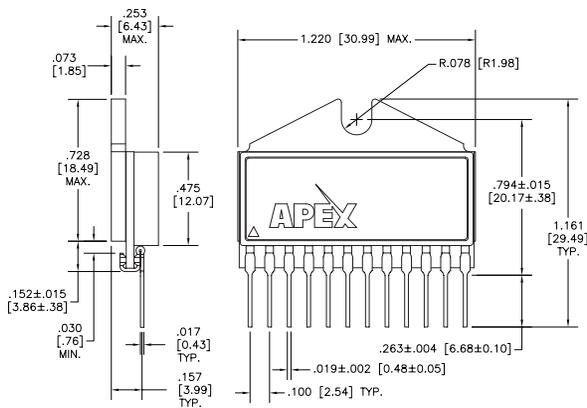
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Packaging, Evaluation Kit

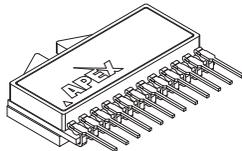
The PA107DP packs a lot of power into its 12-pin PowerSIP package, whether it's the "DP" or the "EE" lead formation option. In terms of board space requirements, the PA107EE will use less than two square inches when mounted horizontally with its 90° lead formation. But the DP package version will take up even less space with its vertical thru hole board attachment. As noted prior, a heatsink is required to realize the SOA.

The EK71 is the evaluation kit for this power op amp and will make it easy to qualify the PA107DP's suitability for the given application circuit design. The kit provides a PC board, heat-sink and all necessary hardware. Evaluation units of the PA107DP are sold separately.



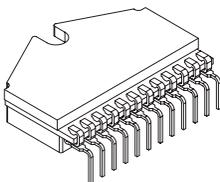
DP Package, 12-Pin PowerSIP

Isolated Case for Direct Heat Sinking



EE Package, 12-Pin PowerSIP

*Bent Lead Formation 90°,
Isolated Case for Direct Heat Sinking*



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