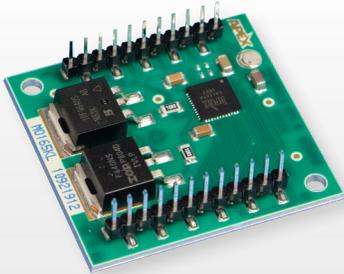




MP165

4A/10A PEAK, 200V Multi-Purpose Power Amplifier



COMPACT OPEN FRAME PACKAGE

Footprint 41.4mm x 42.9mm

FEATURES

- Monolithic MOS Technology for Amplifier Core
- High continuous output current – 4A
- High PEAK output current – 10A
- High supply voltage operation – 205V
- Internal power dissipation – 100W
- Temperature compensated current limit with over-current flag
- Amplifier Disable Feature

Product Overview

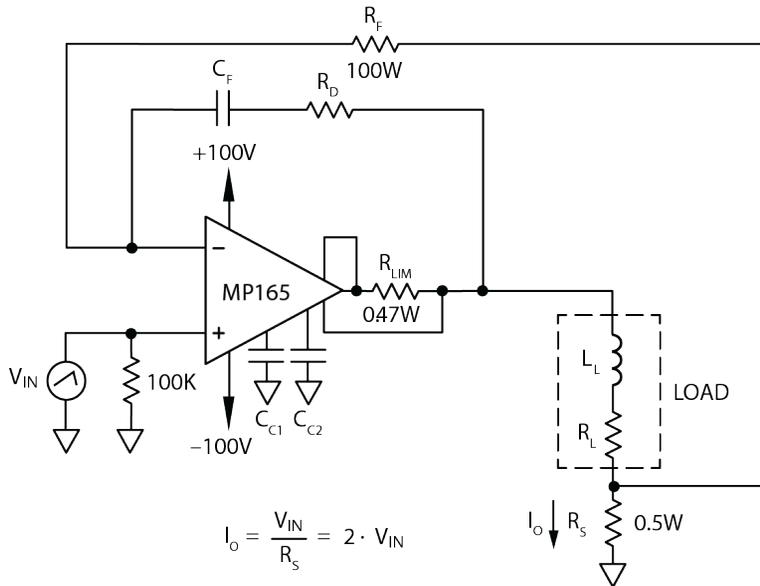
The MP165 from Apex Microtechnology extends the reach of open frame power amplifier performance. Utilizing proprietary monolithic MOSFET technology and a silicon design, this device is designed to provide high voltage and current in a small, open frame package. Depending on the circuit design of the end system, external components can be used to set both the optimum gain and the bandwidth.

Onboard system protection for this device includes a user-defined, temperature compensated current limit and a temperature sensor output. The addition of an output disable function and an over-current flag simplify the implementation of robust failure protection on the system level.

With a footprint measuring just 41.4mm x 42.9mm, this device can provide 4A of output current continuously and 10A PEAK on voltage supplies up to 200V, while dissipating up to 100W of internal power. Thermal efficiency is further increased due to the open frame package, reducing the need for heatsinking.

Typical Applications

Designers can benefit from the power dissipation capabilities offered by the open frame MP165 making heatsinking easier or even unnecessary compared to the PA165. A wide range of target applications include high density voltage or current supplies, test equipment, piezo electric positioning, electrostatic transducers, electrostatic deflection, and focusing for deformable mirrors.



Floating Load Voltage-to-Current Conversion Circuit

MP165

4A/10A PEAK, 200V Multi-Purpose Power Amplifier

Product Specifications

Specification Parameter	MP165
Output Current Continuous	4A
Output Current PEAK	10A
Supply Voltage Operation	205V
Internal Power Dissipation	100W
Onboard Over Current Protection	Yes
Overcurrent Flag and Output Disable	Yes
Built-in Temperature Sensor	Yes
Gain Bandwidth Product @ 1MHz	20MHz
Slew Rate	25 V/ μ s
RoHS Compliant	Yes
Package Style	Open Frame
Package Footprint Measurement	41.4mm x 42.9mm

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

