

## IEEE 802.3af DTE Power via MDI

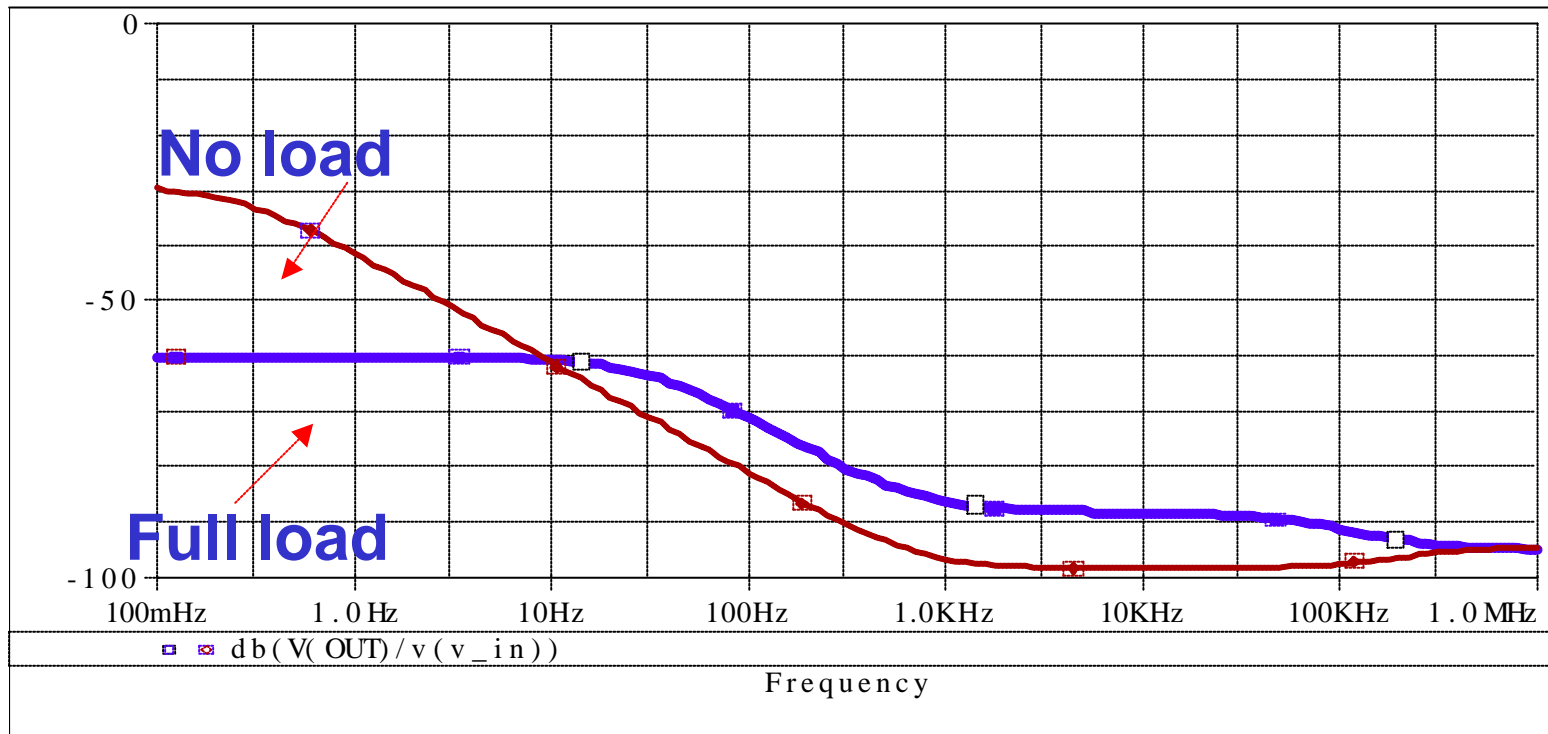
# PD power supply output to input noise rejection ratio

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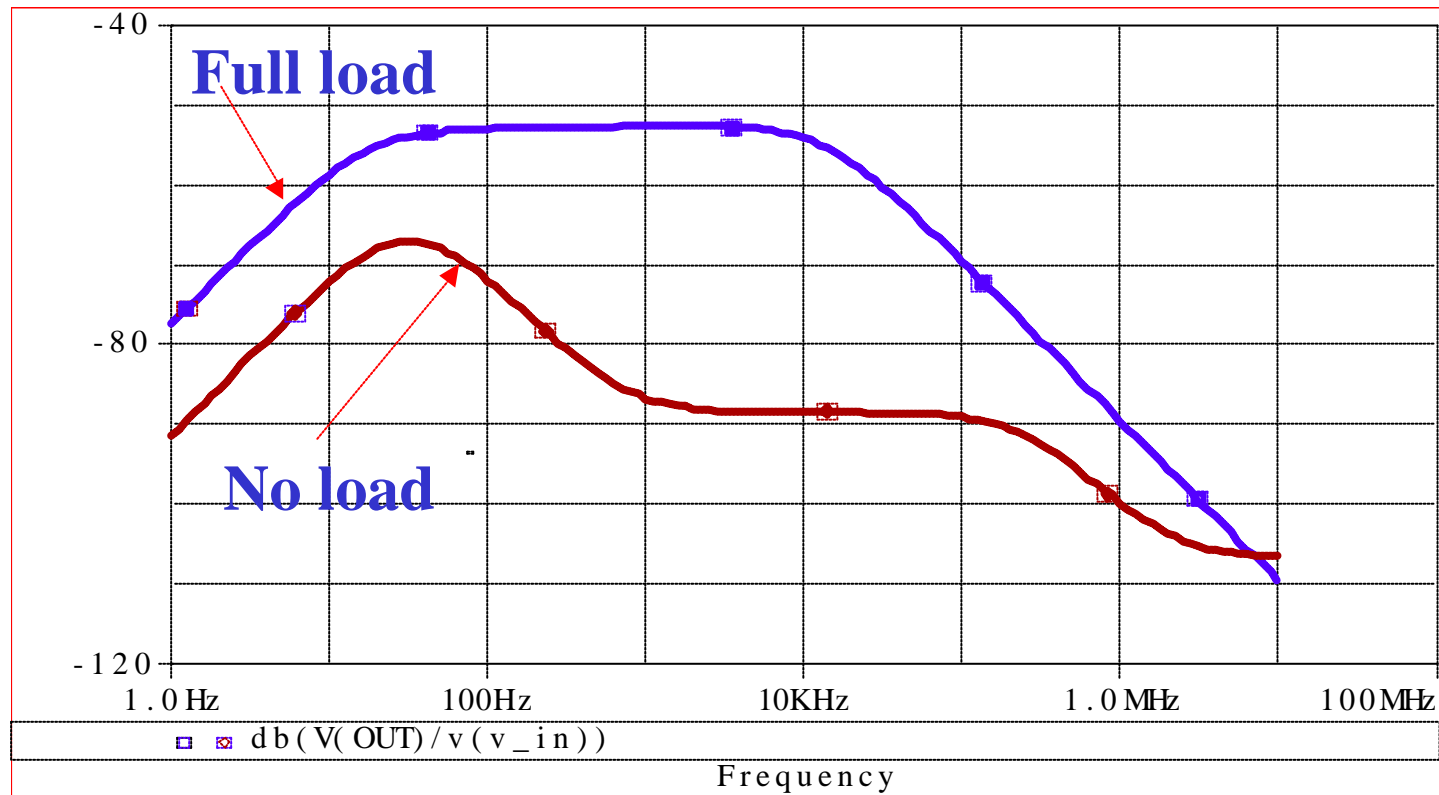


# PD Power supply Vout/Vin ripple rejection

## Flyback, Current Mode type



# PD power supply ripple rejection ratio -Flyback, Voltage Mode type



# PD power supply ripple rejection ratio

- Summary
- Better than 30dB output to input rejection
- Better than 50dB output to input rejection at frequencies from 10Hz to 500Hz.
- With 10-20mV ac disconnect input signals, No audio interference is expected.

$V_{in}=10-20\text{mVpp}$

Attenuation:

30DB up to 1MHZ

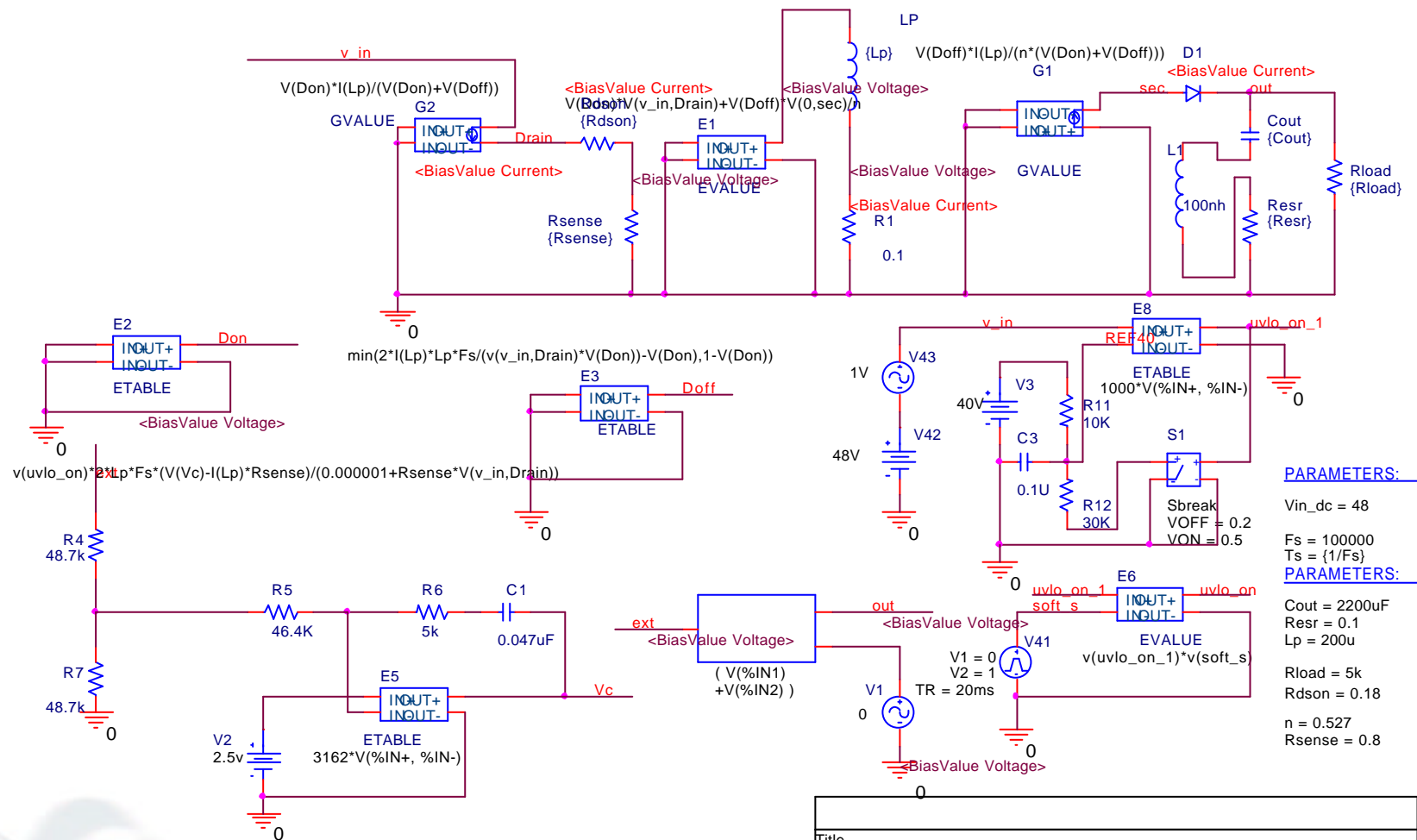
50 DB FROM 10Hz to 500Hz

$V_{out}< 63\mu\text{Vpp}$

**PowerDsine**

PD power supply output to input rejection. Yair Darshan, PowerDsine. March 2002.

# PD power supply model



Soft start time should be  $>$  Vin rise time to control Don for low inrush currents



PD power supply output to input rejection. Yair Darshan, PowerDsine. March 2002.

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Title PD PS MODEL, Yair Darshan, March 2001			
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