

# What Conditions Effect PSRR

#1 thing that effects PSRR performance is the Combo of  $V_{in}/I_{out}$  ( $V_{do}$ )

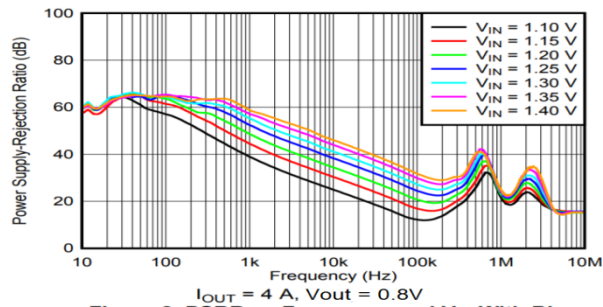


Figure 2. PSRR vs Frequency and  $V_{IN}$  With Bias

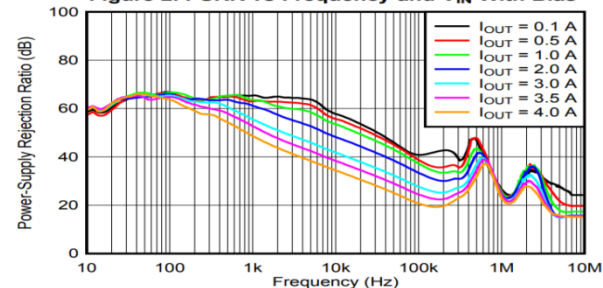


Figure 1. PSRR vs Frequency and  $I_{OUT}$

The next thing that effects PSRR is the noise reduction capacitor

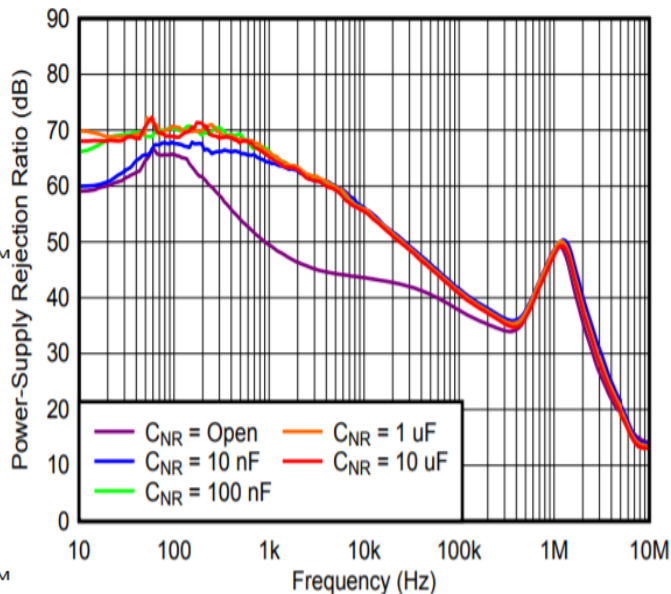


Figure 7. PSRR vs Frequency and  $C_{NR/SS}$

And the final thing that effects PSRR is the feedforward capacitor

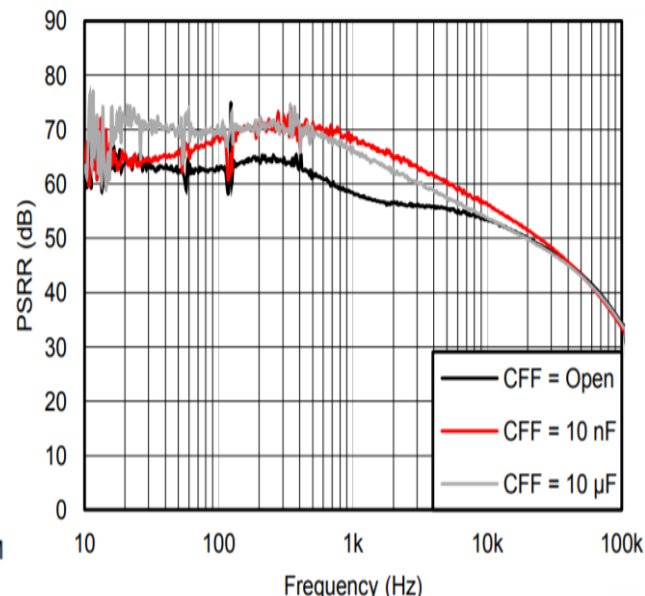


Figure 5. PSRR for Various  $C_{FF}$  Values

# What Conditions Do Not Effect PSRR

Number one thing that has almost no effect on PSRR is  $V_{bias} > min$

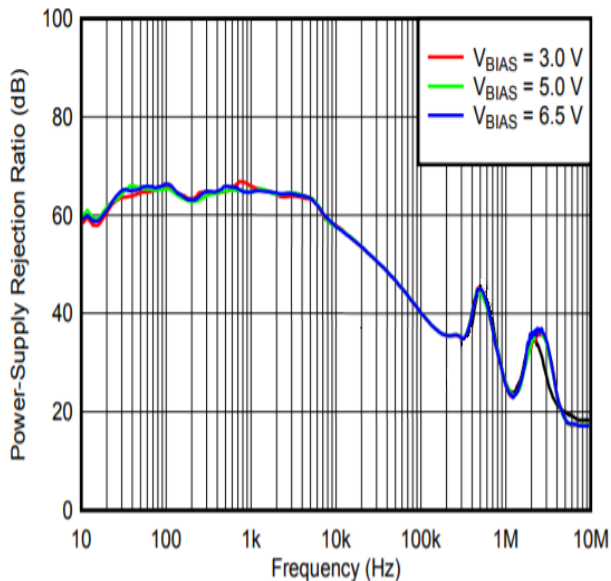


Figure 3. PSRR vs Frequency and  $V_{BIAS}$

The next thing that only has a small effect on PSRR is  $V_{out}$

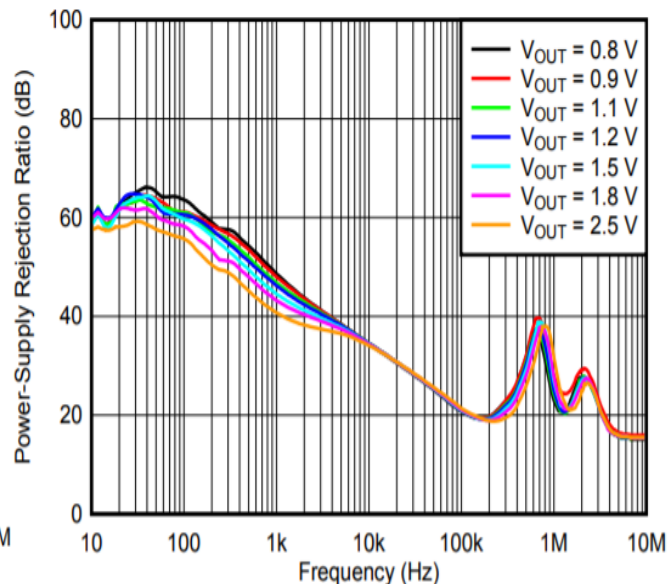


Figure 5. PSRR vs Frequency and  $V_{OUT}$  With Bias

And the final thing that has some effect (but only at high freq) is output capacitor

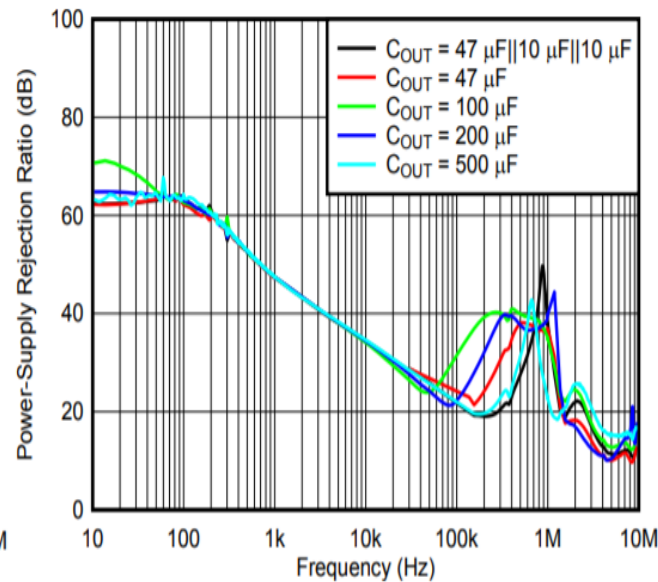


Figure 7. PSRR vs Frequency and  $C_{OUT}$

# What Conditions Effect Noise

Number one thing that effects noise performance is the output voltage

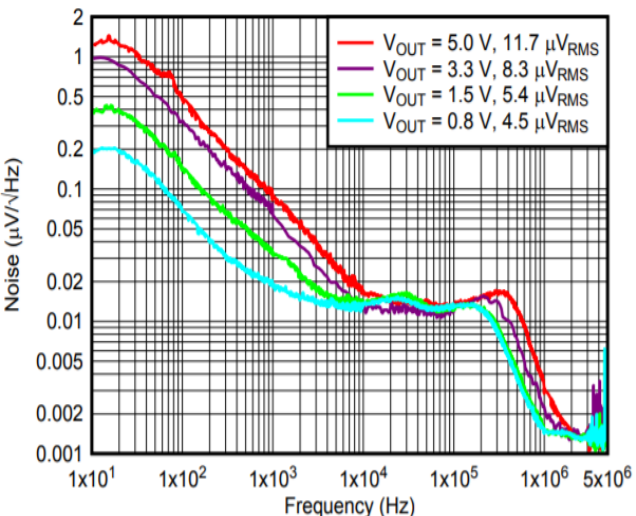


Figure 10. Output Noise vs Frequency and Output Voltage

The next thing that effects noise is the noise reduction capacitor

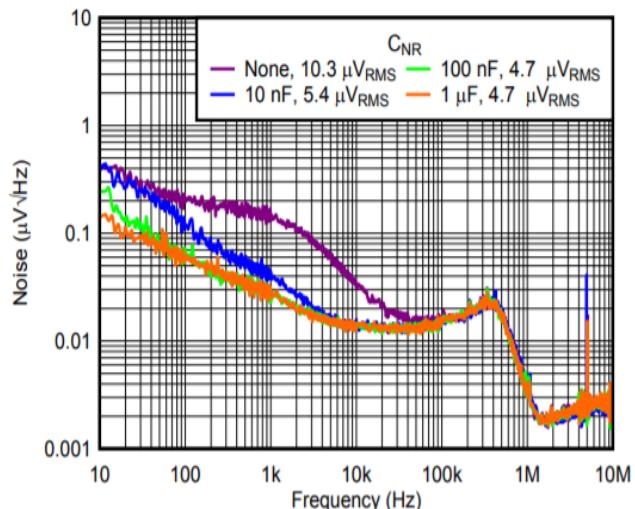


Figure 9. Spectral Noise Density vs Frequency and  $C_{NR/SS}$

And the final thing that effects noise to a large degree is the feedforward capacitor

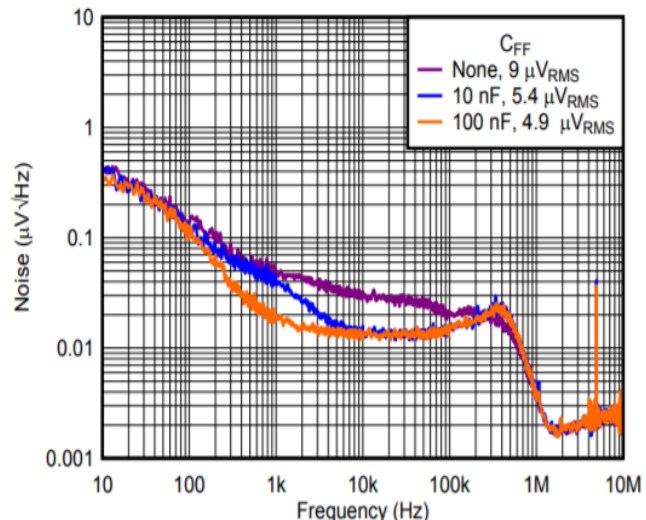
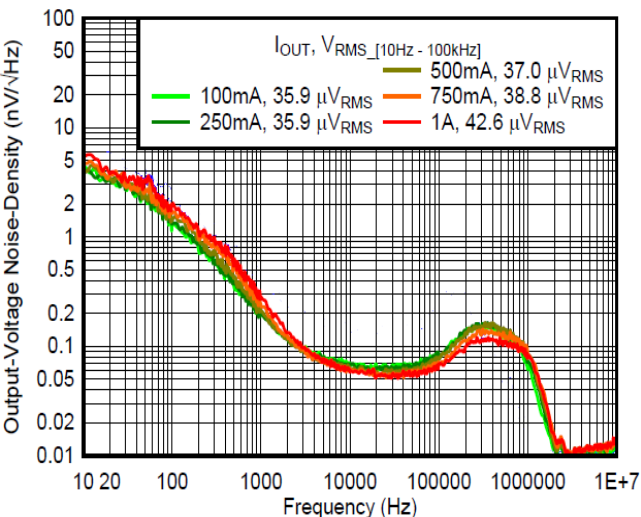


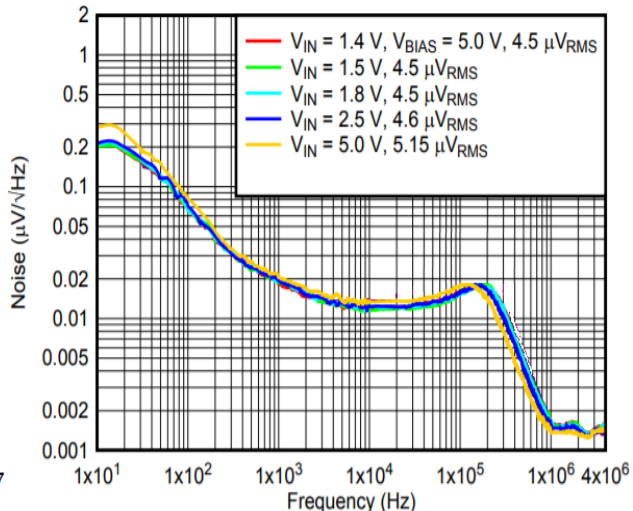
Figure 10. Spectral Noise Density vs Frequency and  $C_{FF}$

# What Conditions Do Not Effect Noise

Number one thing that has almost no effect on noise is output current



The next thing that has very little effect on noise is  $V_{IN}$



And the final thing that has a small effect on noise is output capacitor (very large  $C_{OUT}$  can show some difference)

