

# Power Supply Rejection Error

TI Precision Labs – Current Sense Amplifiers

Quiz

# Power supply rejection error – quiz

1. Power supply rejection error is due to the finite rejection of variation in power supply by the current sense amplifier.
  - a) True
  - b) False
  
2. The power supply in my circuit is 5V, same as indicated by the datasheet “Electrical Characteristics” table test condition. Therefore, the effective PSRR error equals to zero, and can be ignored.
  - a) True
  - b) False

# Power supply rejection error – quiz

3. In what unit is power supply rejection typically specified? (select all that apply)
- a)  $\mu\text{V}/\text{V}$
  - b) %
  - c)  $\mu\text{V}$
  - d) dB
4. A current sense amplifier has a fixed gain of 20. During characterization, you found that when its DC power supply varied 10V, its output varied 200 $\mu\text{V}$ . What is its PSRR in  $\mu\text{V}/\text{V}$ ?
- a) 2
  - b) 1
  - c) 20
  - d) 10

# Answers

# Power supply rejection error – quiz

1. Power supply rejection error is due to the finite rejection of variation in power supply by the current sense amplifier.

a) True

b) False

2. The power supply in my circuit is 5V, same as indicated by the datasheet “Electrical Characteristics” table test condition. Therefore, the effective PSRR error equals to zero , and can be ignored.

a) True

b) False

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4. A current sense amplifier has a fixed gain of 20. During characterization, you found that when its DC power supply varied 10V, its output varied 200 $\mu\text{V}$ . What is its PSRR in  $\mu\text{V}/\text{V}$ ?

a) 2

b) 1

c) 20

d) 10