

Q: SI-9010 Phase shift check on 20KHz Frequency

Conclusion:

Based on our investigation, the phase shift response of SI-9010 on frequencies from 100Hz to 20KHz on both 1/10 & 1/100 attenuation have a minimal shift from input to output frequencies. It is only about a maximum of 0.3 degree & minimum of -0.5 degree phase shift. The equipment used to measure the phase shift is 8bit oscilloscope which have a digitizing error of 0.390%. The measured phase shift is already very close to the equipment digitizing error. This means that the phase shift from 100Hz to 20KHz frequencies is negligible. Please see below figure for more details.