TFT Matched Resistor Networks for Precision Amplifier Applications

Some op-amp configurations assume that the feedback resistors have perfect matching. In reality, the use of individual discrete resistors, which cannot offer resistor matching, can affect various circuit parameters such as Common Mode Rejection Ratio (CMRR), harmonic distortion and stability. The use of a resistor network which offers tight resistor matching ensures that the designer can meet amplifier data sheet specifications.

The use of two of Thin Film Technology’s S6 Series resistor networks in precision amplifier applications can eliminate these concerns. The S6 resistor network contains two resistors in an SOT-23 package and offers resistor matching as tight as ±0.02%. Figure 1 below shows the layout of these resistor networks for an op-amp application.

Additional information on the S6 Series resistor networks can be found on our website by using the following LINK.

![Figure 1: Incorporation of TFT’s S6 Series Resistor Network for op-amp applications](image-url)