

Figure 1. Relative accuracy of 4-20mA circuit measured at different temperature for MCU_Beta design

Comment:

- 1. All the curves in Figure 1 are relative accuracy curve, which defined as the difference between measured current and calculated current in percentage.
- 2. The red curve in Figure 1 was measured when Schottky diode D14 and D16 were removed. All the other curves were measured with Schottky diode D14 and D16 soldered on MCU board.
- 3. After comparing these curves, we know that it was the protection Schottky diode caused the low relative accuracy at high temperature.
- 4. Relative accuracy of 4-20mA is much better than 2.5% in full 4-20mA output range even at +85C