



ON Semiconductor

## Test Procedure for the CS5171/CS5173 Evaluation Board

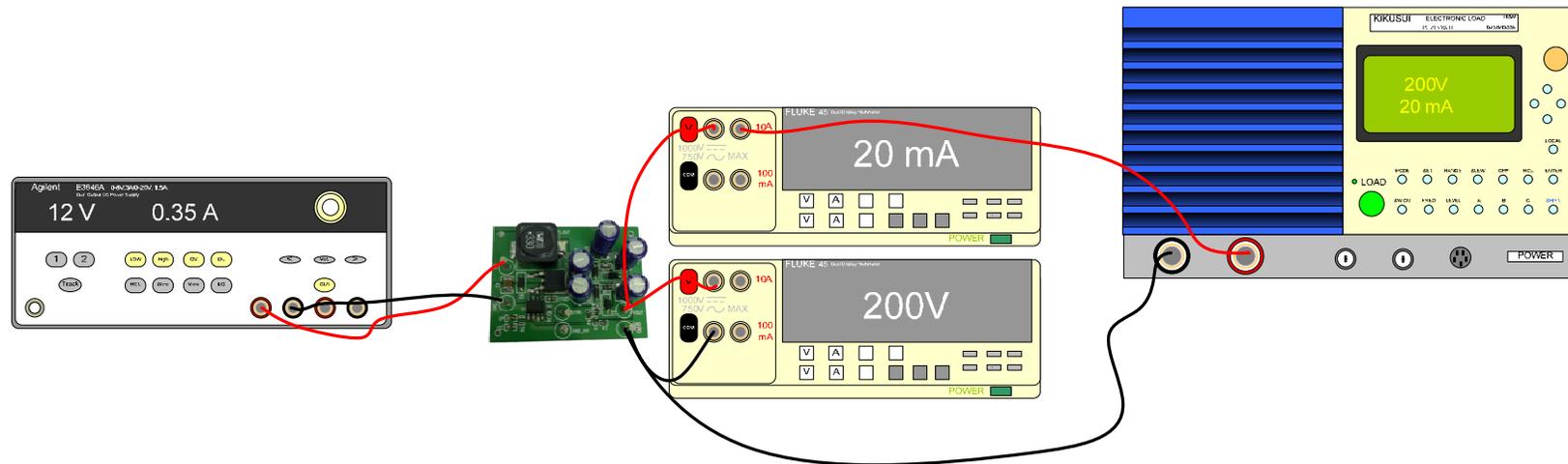


Figure 1: Test Setup

The following steps describe the test procedure for all these boards:

### Suggested Equipment:

- Current limited DC Power Supply (e.g. AGILENT 6645A) ..... 1pc
- DC Volt-Meter able to measure up to 60 V DC (e.g. KEITHLEY 2000) ..... 2pcs
- DC Amp-Meter able to measure up to 2 A DC (e.g. KEITHLEY 2000) .....1pc
- DC Amp-Meter able to measure up to 5 A DC (e.g. FLUKE 89 IV)..... 1pc
- DC Electronic Load (e.g. KIKUSUI PLZ153WH) ..... 1pc

**Test Procedure:**

1. Connect the test setup as shown in Figure 1.
2. Apply an input voltage,  $V_{IN} = 12 \text{ Vdc}$
3. Apply  $I_{OUT}(\text{load}) = 0 \text{ A}$
4. Check that  $V_{OUT} = 200\text{V} \pm 5\% \text{ Vdc}$
5. Set  $I_{OUT}$  to desired level 0 mA- 20 mA and measure voltage and current. The efficiency should be similar to that shown in Figure 3 and 4.
6. Check that  $V_{OUT} = 200\text{V} \pm 5\% \text{ Vdc}$  under desired operating condition
7. Turn off the load
8. Turn off  $V_{IN}$
9. End of the test

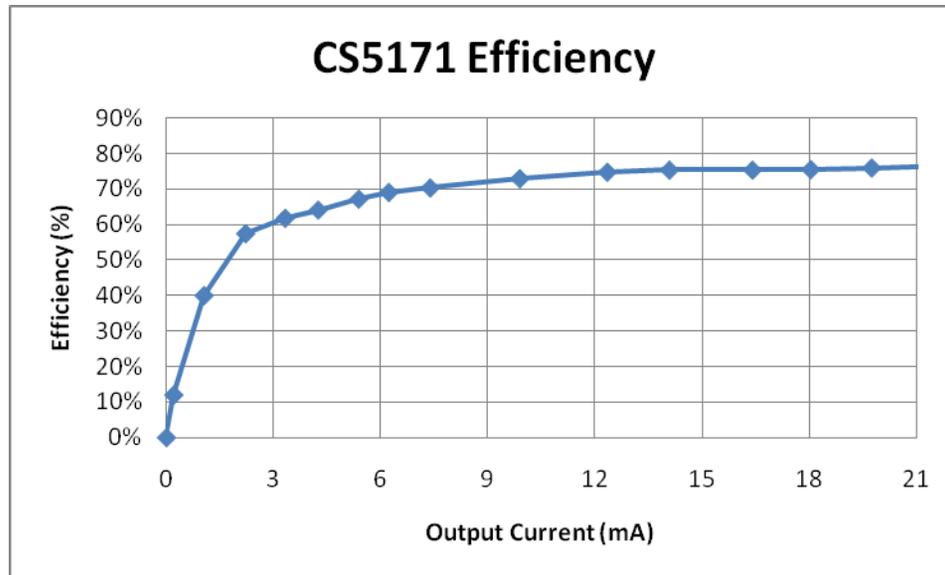


Figure 2: CS5171 12V to 200V Efficiency

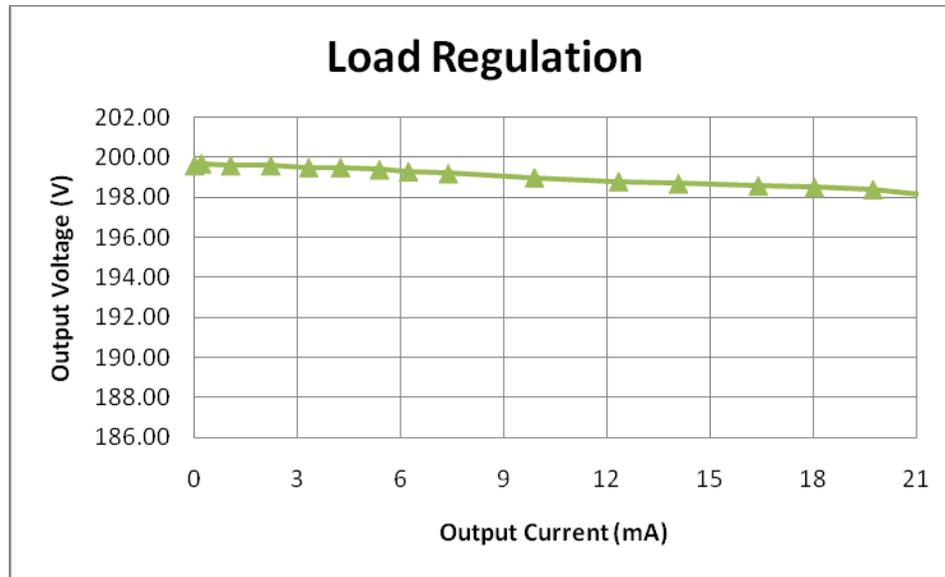


Figure 3: CS5171 12V to 200V Load Regulation