Date of Test: 09/11/2004

Purpose of Test: To examine any current spikes during JFET switch-on

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Setup:

- EM (Flight-like) PSU
- QM1 DCU
- 8.13kΩ fixed resistor across Vdd and Vss connected via test connector directly to DCU
- 1.096kΩ fixed resistor across JFET heater connected via test connector directly to DCU

Procedure:

- 1. Switch on Vdd. See Figure 1
- 2. Switch on Vss. See Figure 2
- 3. Switch on JFET heater. See Figure 3
- 4. Switch off JFET heater. See Figure 4

Conclusion:

No smoking gun...

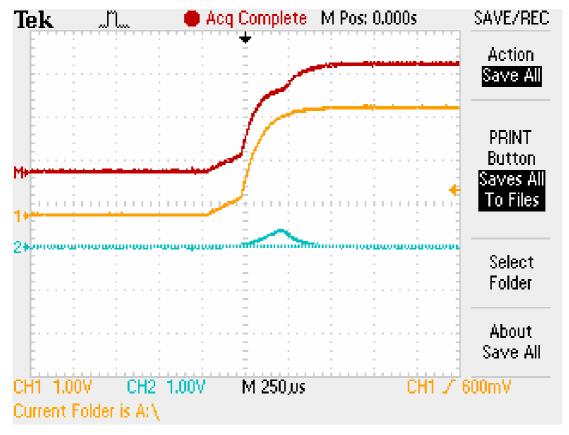


Figure 1 – JFET Bias switch on Vdd. Yellow=Vdd, Blue=Vss, Red= Difference

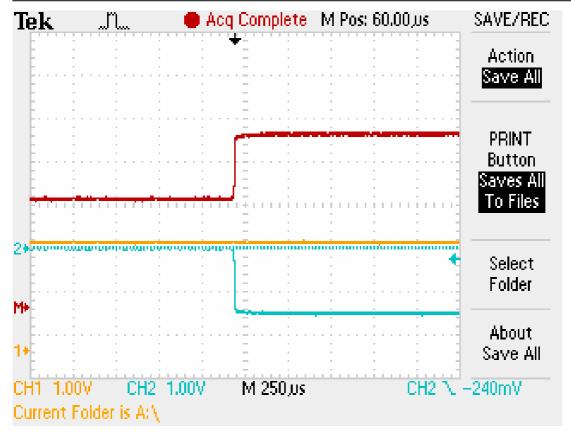


Figure 2 - JFET Bias switch on Vss. Yellow=Vdd, Blue=Vss, Red= Difference

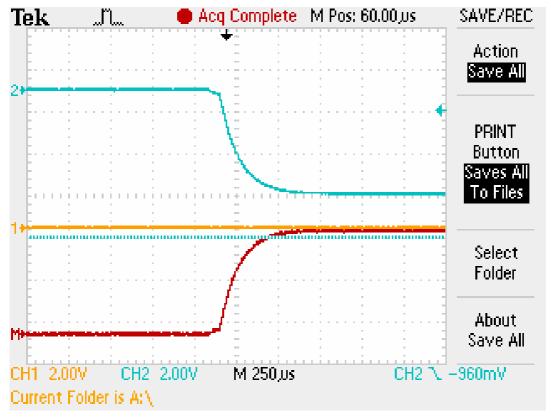


Figure 3 – Heater switch on. Red=Drive, Yellow=Ret, Red=Difference.

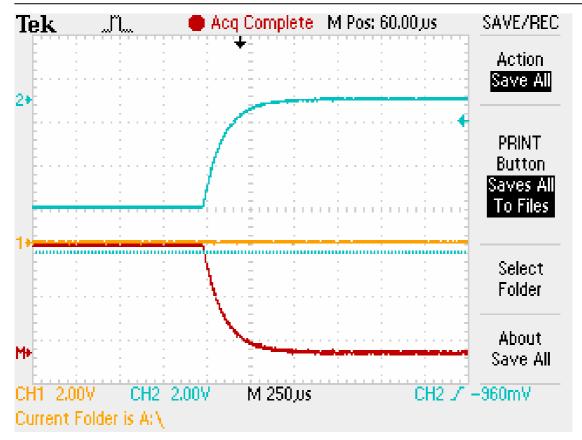


Figure 4 Heater switch off. Red=Drive, Yellow=Ret, Red=Difference