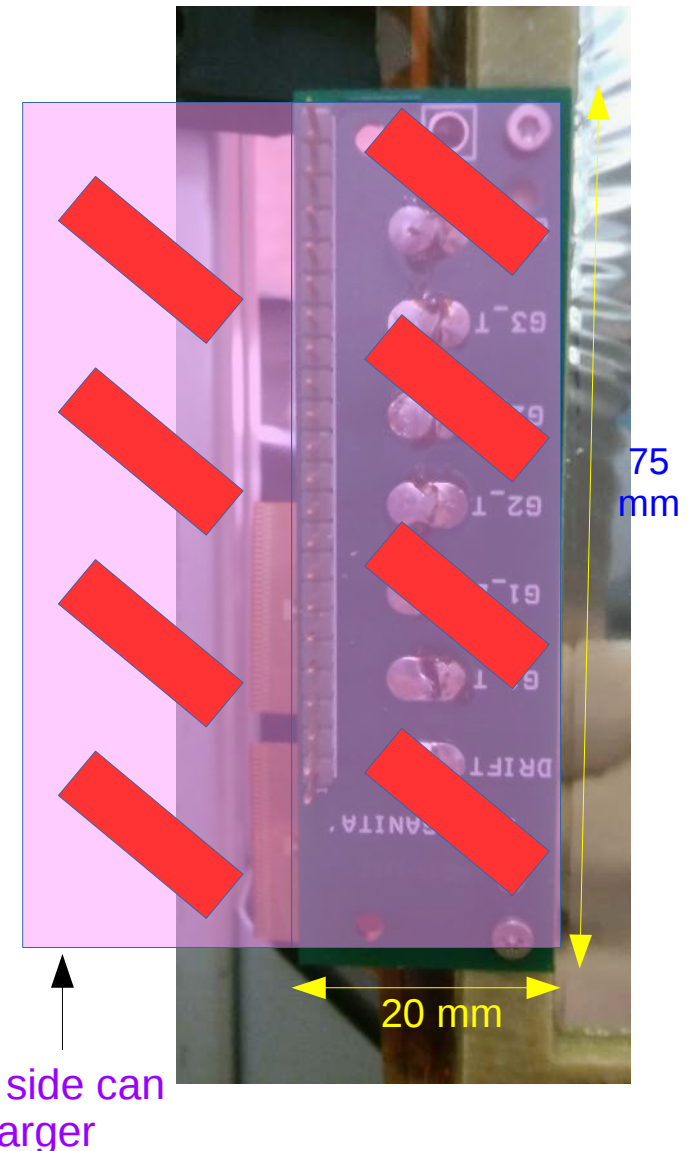


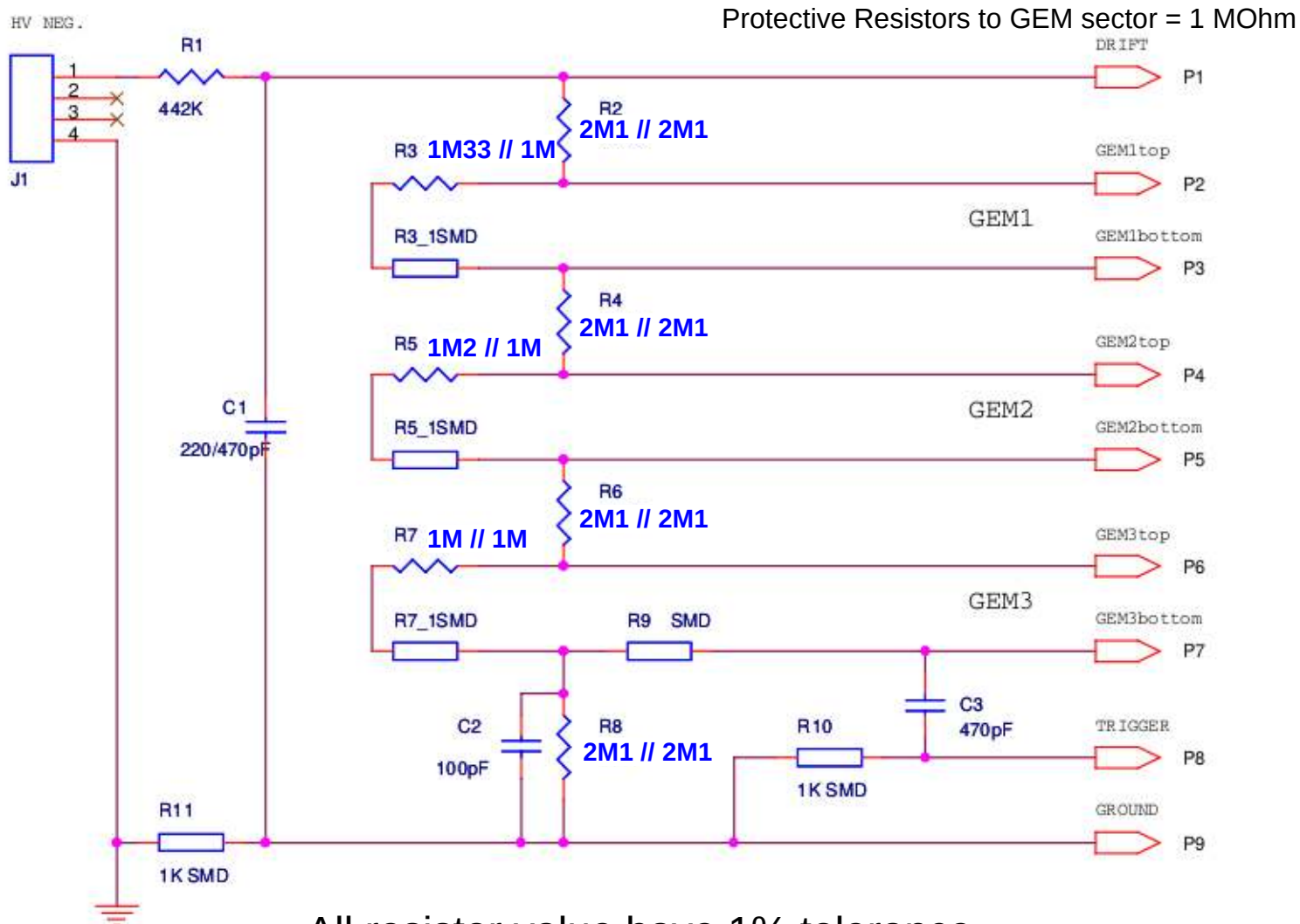
hi-Divider - work in progress (in Rome)

(Dave, Ezekiel, Holly, Evaristo, Fausto, Roberto)

- Moving on “parallel” directions:
 - provide temporary “high current” dividers with the available resistors (0.5 W) and boards → parallel dividers
 - design a new divider board (~twice larger than the current one) for the SMD resistors identified by Dave; considering the possibility to have also them in parallel



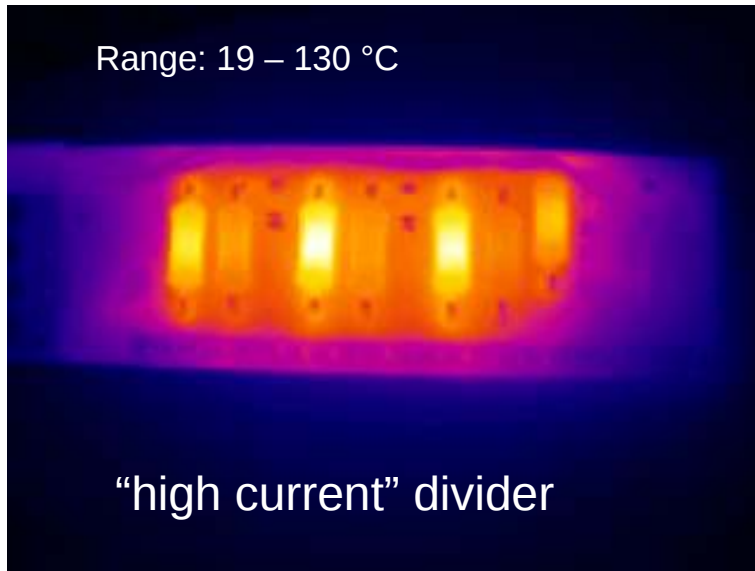
Divider with parallel resistors



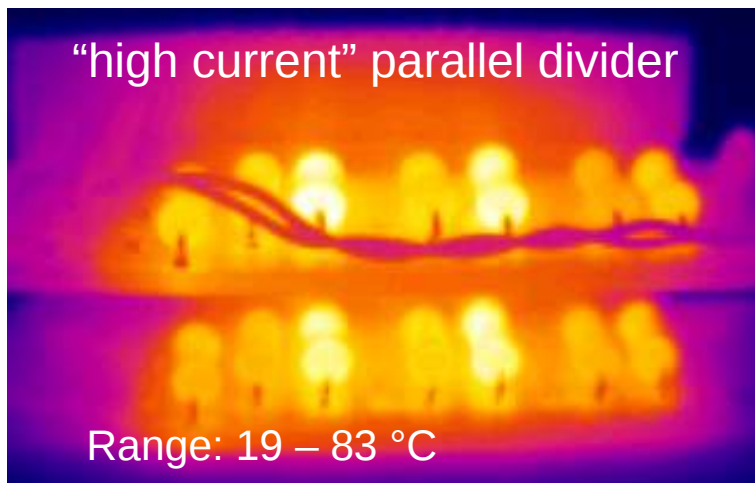
All resistor value have 1% tolerance and have **0.5 W** rating, 200 ppm/K (-55 °C, 155 °C)

Divider Current at 4000 V is ~686 uA
max estimated W/resistor ~ 0.25 W

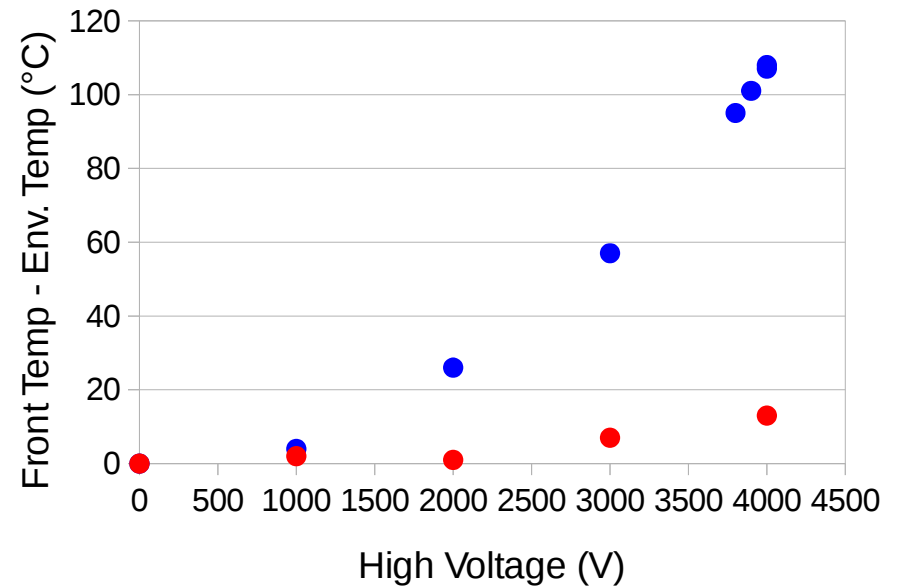
Temperature vs HV



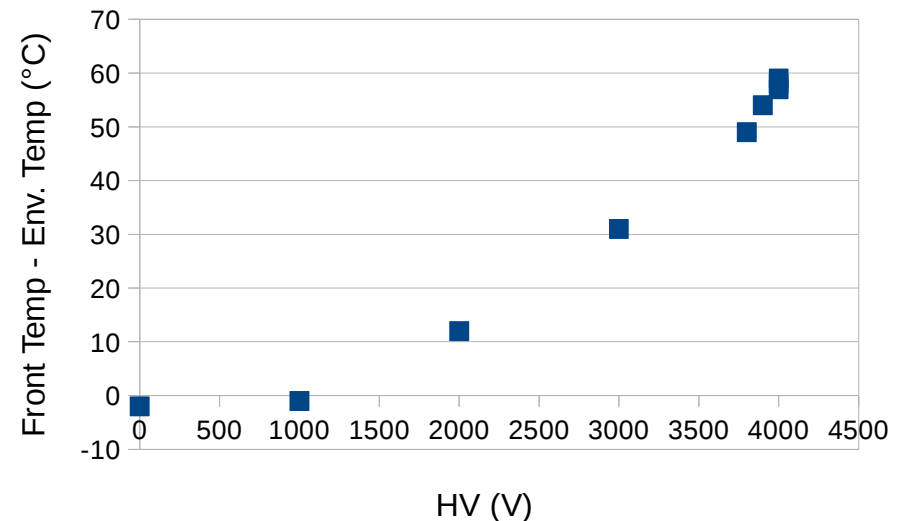
**Front 4000 V
(not connected to GEM)**



Dividers Front Temperature vs HV



Parallel Divider Front Temperature



@4000V current and temperature monitored for 2 h, no noticeable variation

Attempt to test GEM+parallel_divider with Xray

- Parallel divider connected to GEM
 - Raised HV at step of 1000 V and measured current and temperature
 - When HV reached ~3500V the GEM started to get noisy (likely internal sparking, no evidence near divider)
 - Ramped HV again and sparking reoccurred at ~3500V
 - No chance to test the parallel divider with X-ray yet
- need to investigate the new GEM issue

**Solved! Trivial mistake:
! Divider connection inverted when plugged on GEM!
Xray measurement likely tomorrow
(do not expect surprises from the parallel divider)**