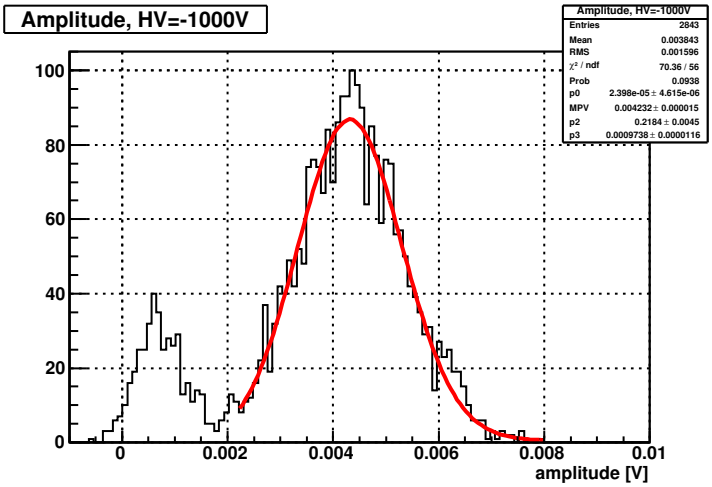
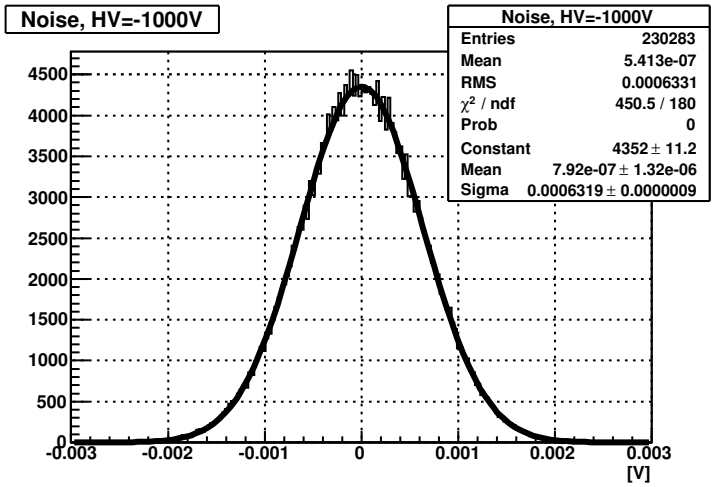
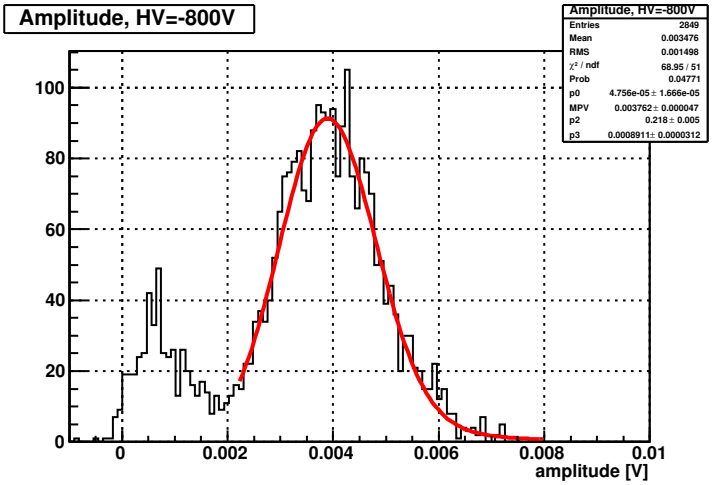
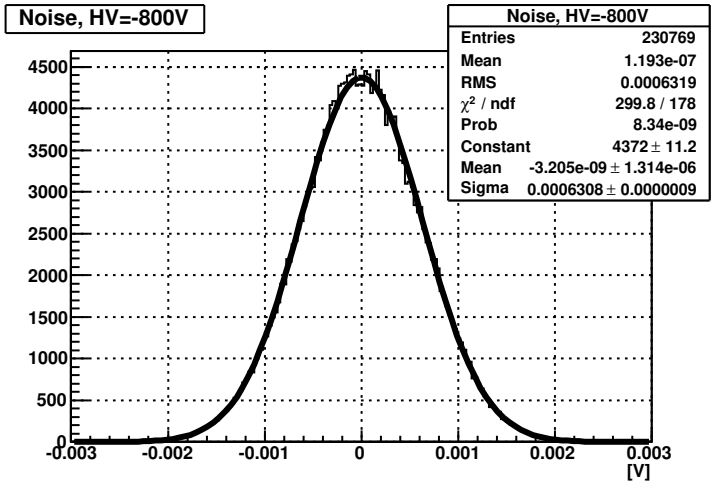
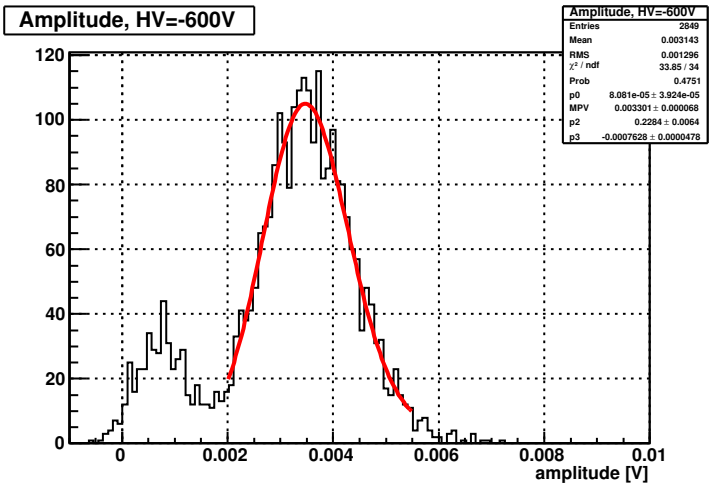
# Fotec Box 402 (A230-10 and A230-08), Measurement 4

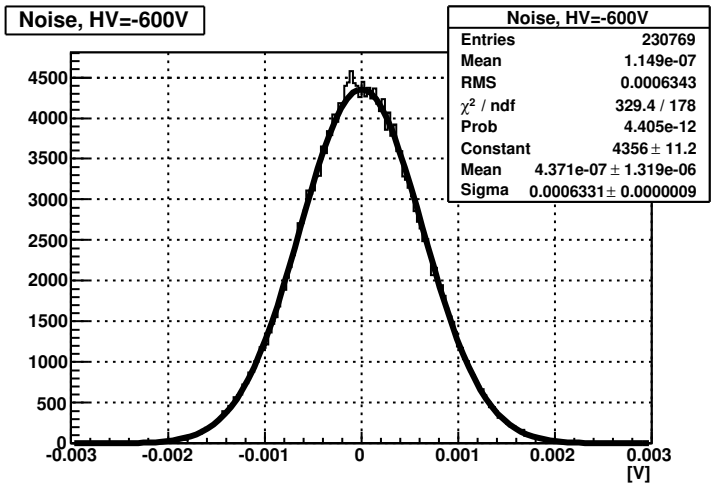


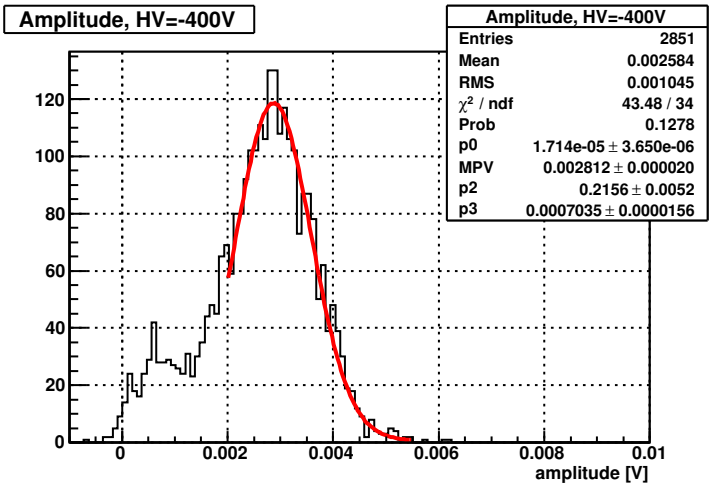



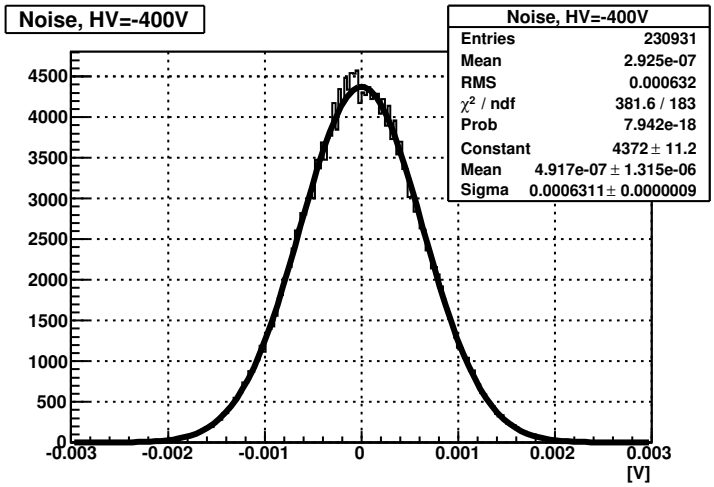



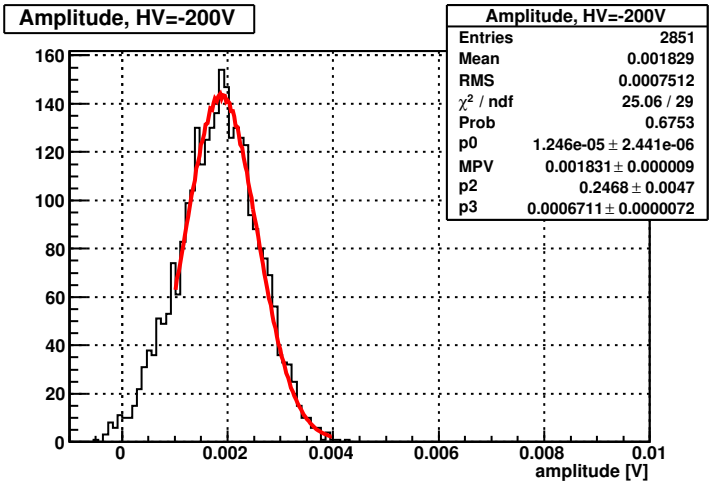



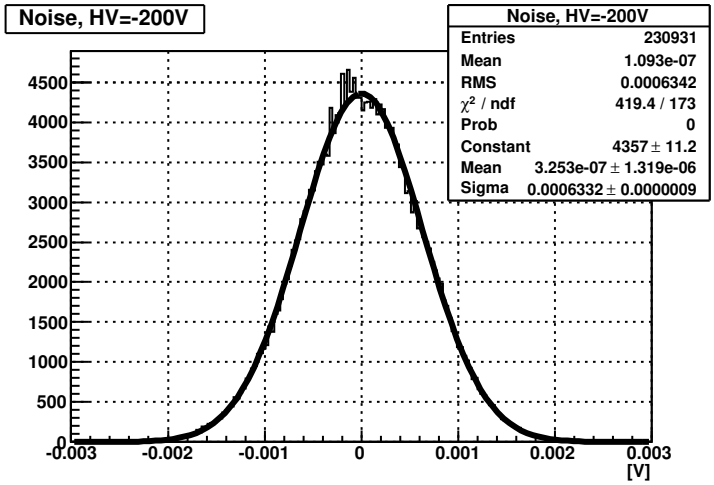



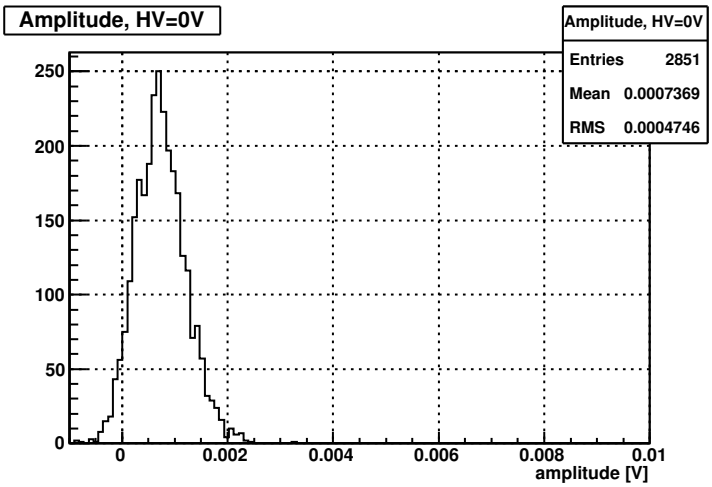



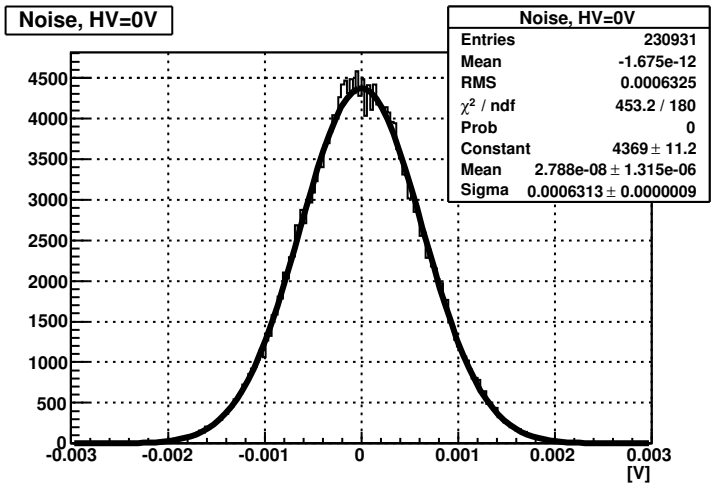

Amplitude, HV=-400V
Amplitude, HV=-400V
Entries 2851
Mean 0.002584
RMS 0.001045
χ² / ndf 43.48 / 34
Prob 0.1278
p0 1.714e-05 ± 3.650e-06
MPV 0.002812 ± 0.000020
p2 0.2156 ± 0.0052
p3 0.0007035 ± 0.0000156
amplitude [V]


Noise, HV=-400V
Noise, HV=-400V
Entries 230931
Mean 2.925e-07
RMS 0.000632
χ² / ndf 381.6 / 183
Prob 7.942e-18
Constant 4372 ± 11.2
Mean 4.917e-07 ± 1.315e-06
Sigma 0.0006311 ± 0.0000009
[V]

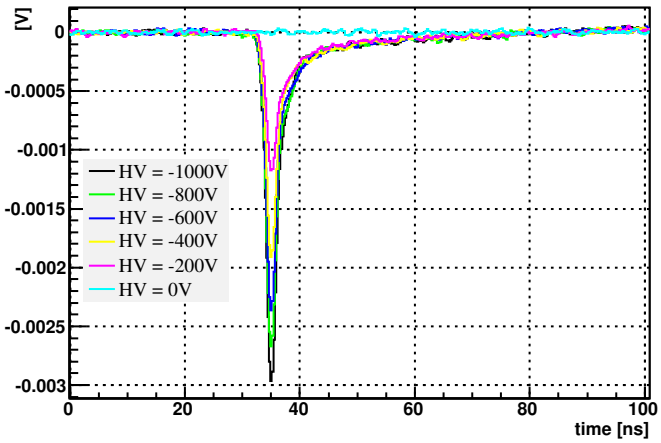

Amplitude, HV=-200V
Amplitude, HV=-200V
Entries 2851
Mean 0.001829
RMS 0.0007512
χ² / ndf 25.06 / 29
Prob 0.6753
p0 1.246e-05 ± 2.441e-06
MPV 0.001831 ± 0.000009
p2 0.2468 ± 0.0047
p3 0.0006711 ± 0.0000072
amplitude [V]

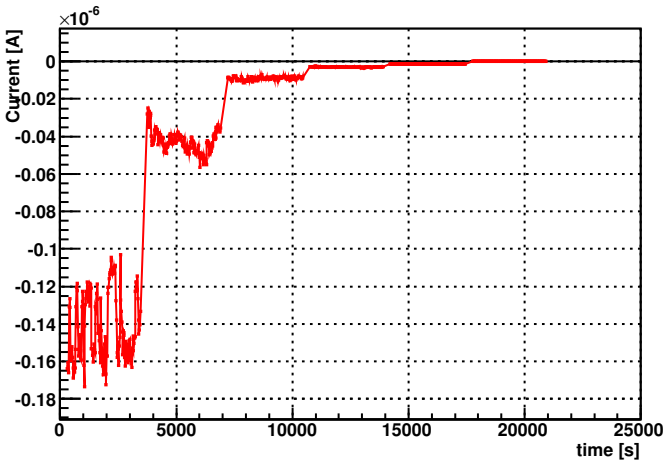

Noise, HV=-200V
Noise, HV=-200V
Entries 230931
Mean 1.093e-07
RMS 0.0006342
χ² / ndf 419.4 / 173
Prob 0
Constant 4357 ± 11.2
Mean 3.253e-07 ± 1.319e-06
Sigma 0.0006332 ± 0.0000009
[V]


Amplitude, HV=0V
Amplitude, HV=0V
Entries 2851
Mean 0.0007369
RMS 0.0004746
amplitude [V]

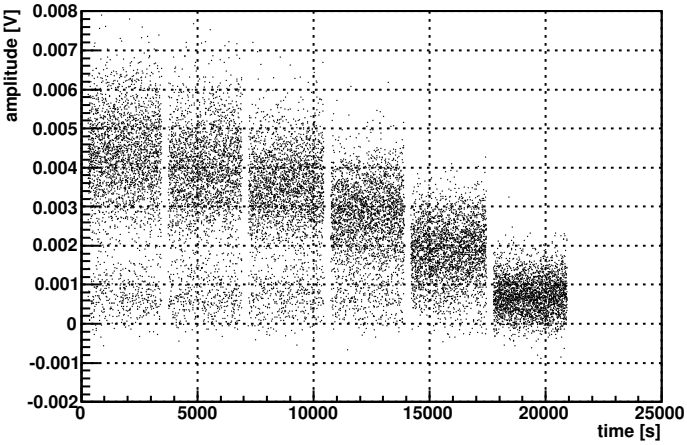

Noise, HV=0V
Noise, HV=0V
Entries 230931
Mean -1.675e-12
RMS 0.0006325
χ² / ndf 453.2 / 180
Prob 0
Constant 4369 ± 11.2
Mean 2.788e-08 ± 1.315e-06
Sigma 0.0006313 ± 0.0000009
[V]

**Average event**

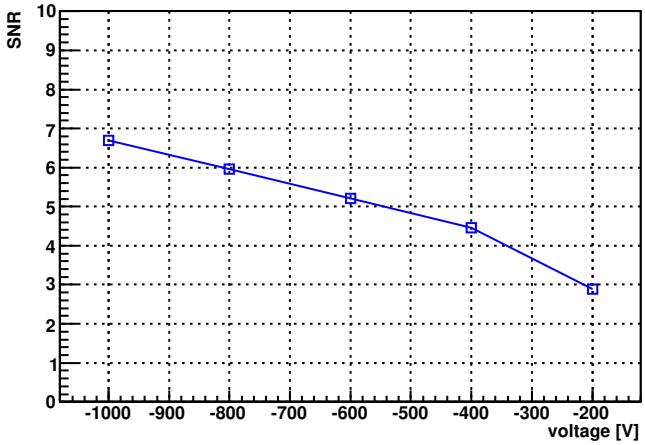


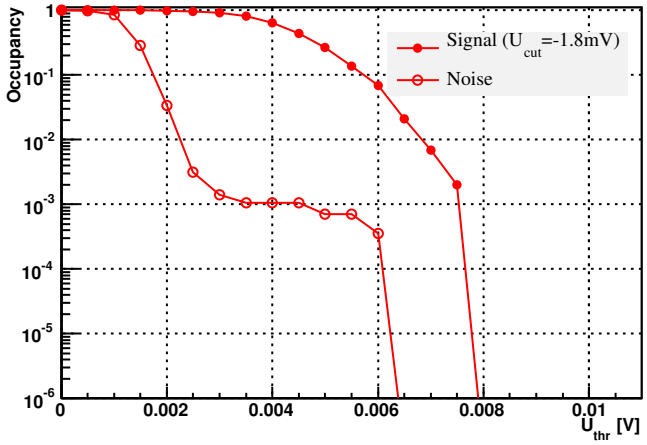

**amplitudes**



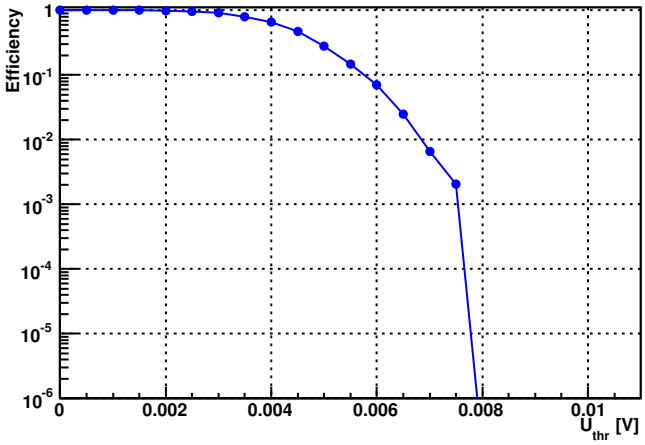

**Signal to noise**

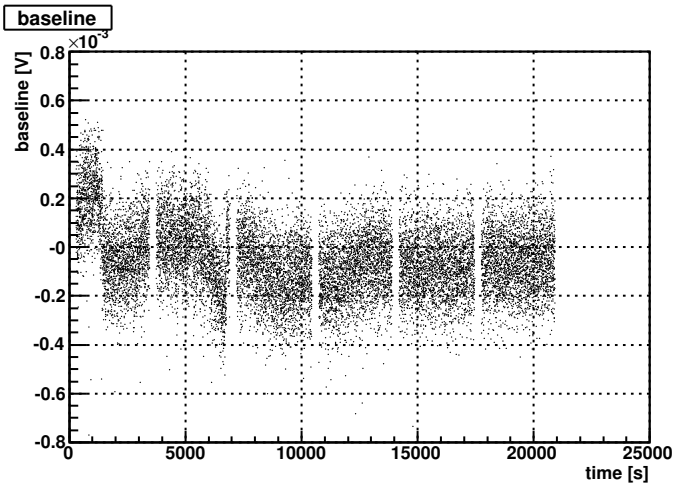


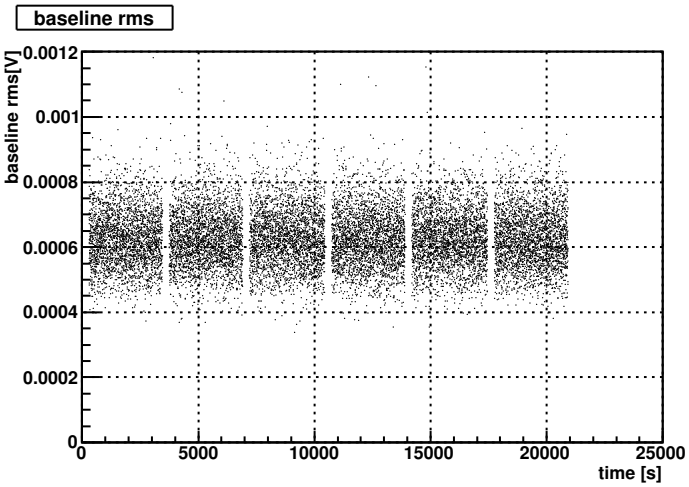

**Occupancy vs Threshold, HV=1000V**

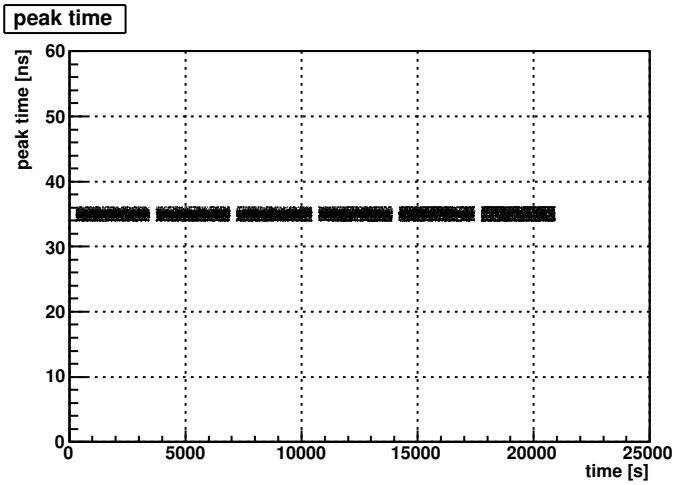



**Efficiency vs Threshold, HV=1000V**




baseline
baseline [V]
×10⁻³
0.8
0.6
0.4
0.2
-0
-0.2
-0.4
-0.6
-0.8
0
5000
10000
15000
20000
25000
time [s]


baseline rms
baseline rms[V]
0.0012
0.001
0.0008
0.0006
0.0004
0.0002
0
0
5000
10000
15000
20000
25000
time [s]


peak time
peak time [ns]
60
50
40
30
20
10
0
0
5000
10000
15000
20000
25000
time [s]

Data File = SP_050914094701_Fotec402-A230-08_A230-10-measurement4.xls
Upper Diamond = A230-08, $\sim 500 \mu m$ thick, Au metailzation
Lower Diamond = A230-10, $\sim 500 \mu m$ thick, Au metailzation