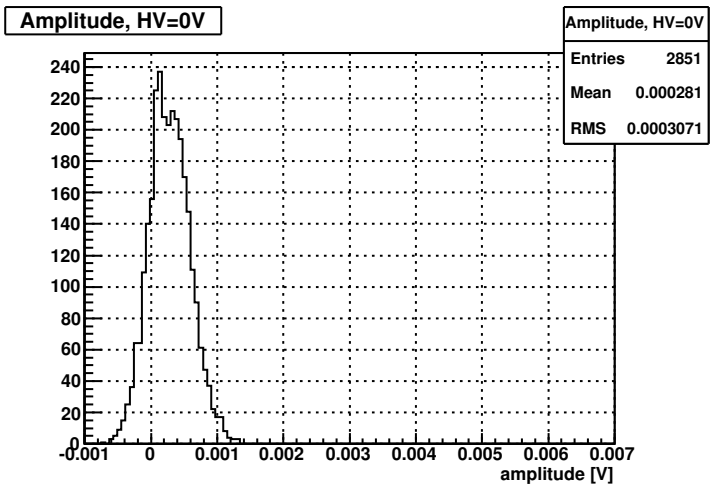
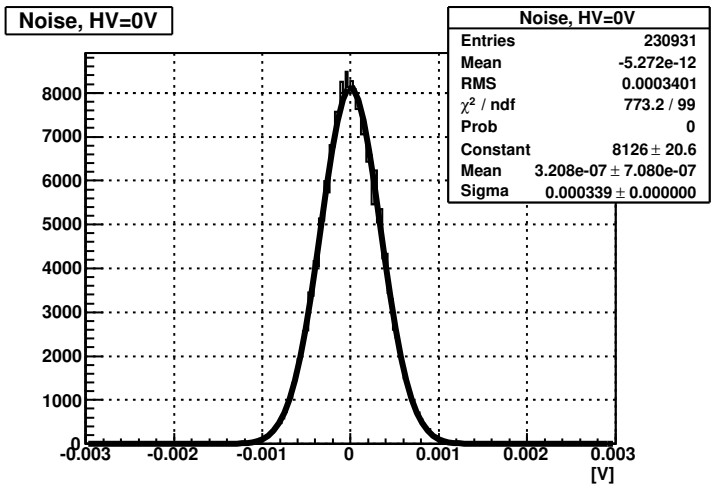
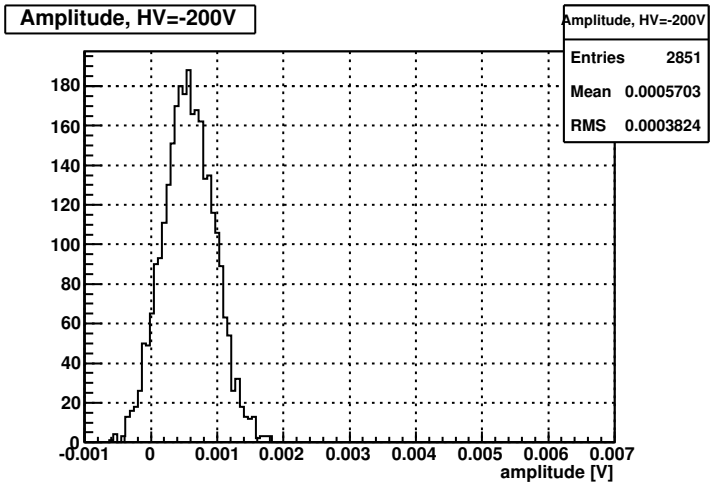
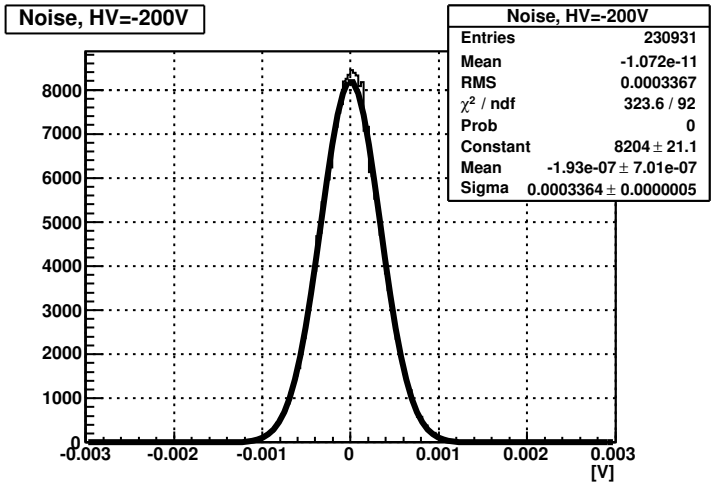
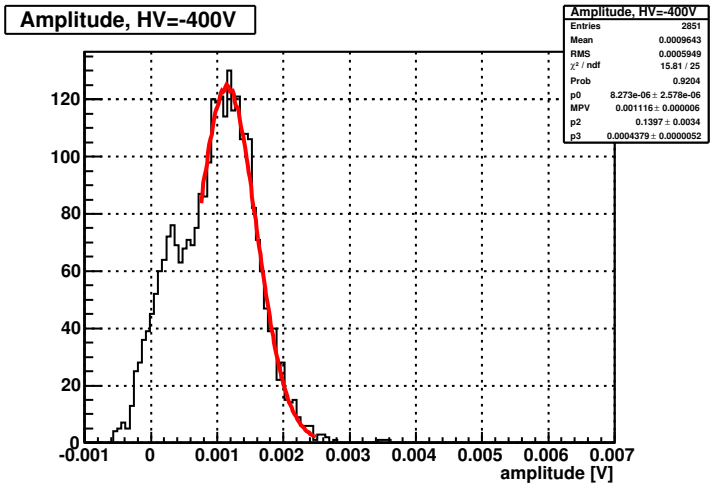
Fotec Box 408, (A382-11 and A382-8), Measurement 3 (BWL 200MHz), resistor changed 150Ω → 130Ω

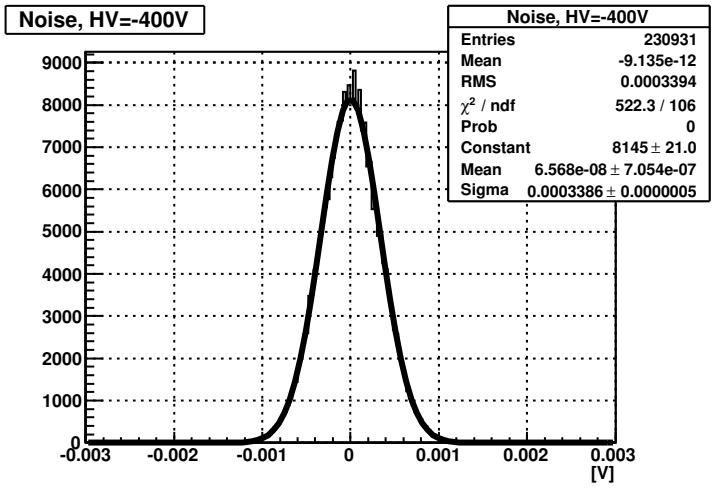


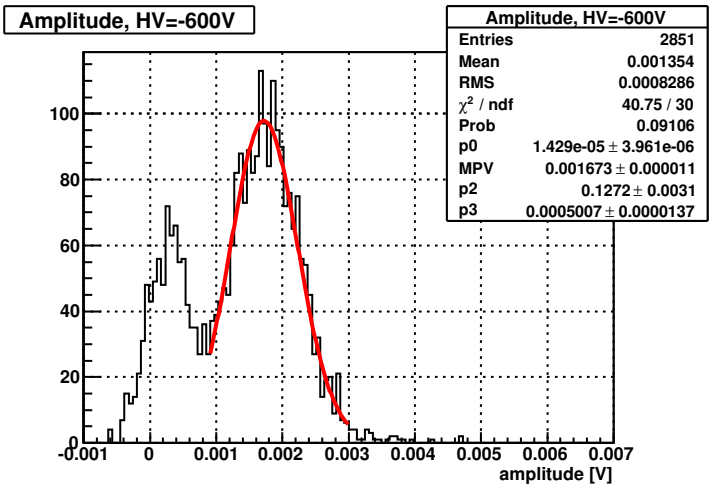


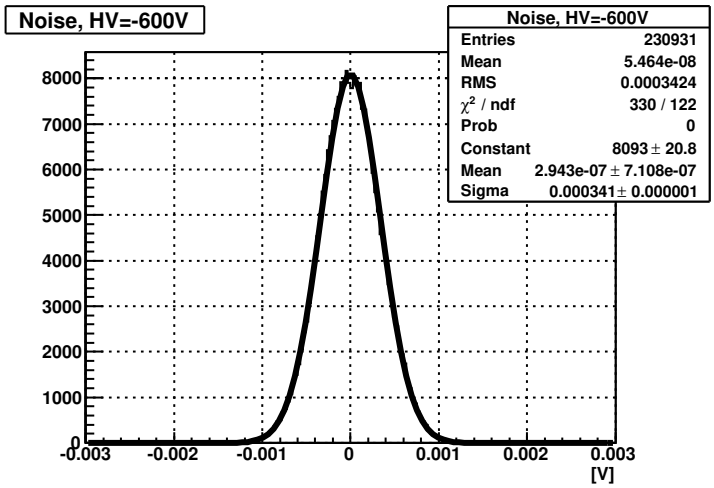


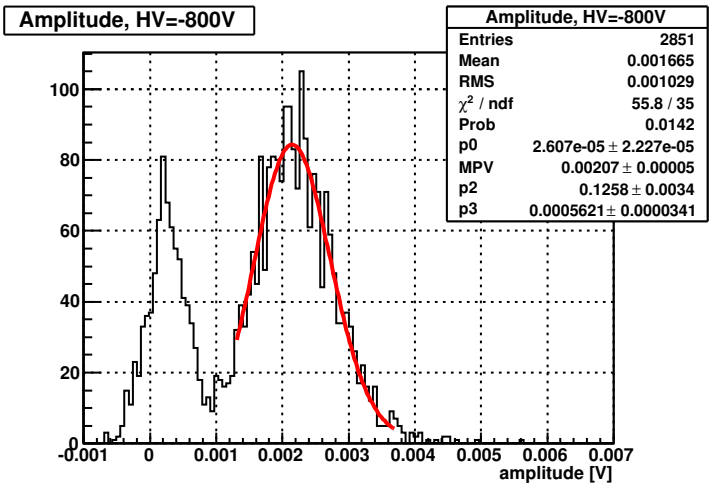


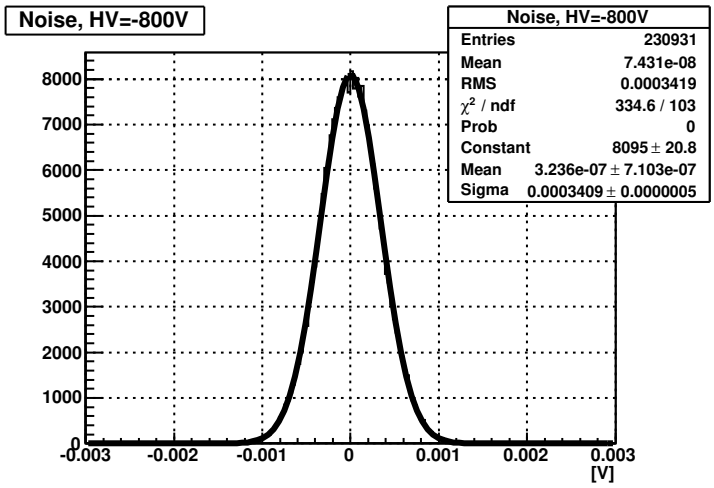


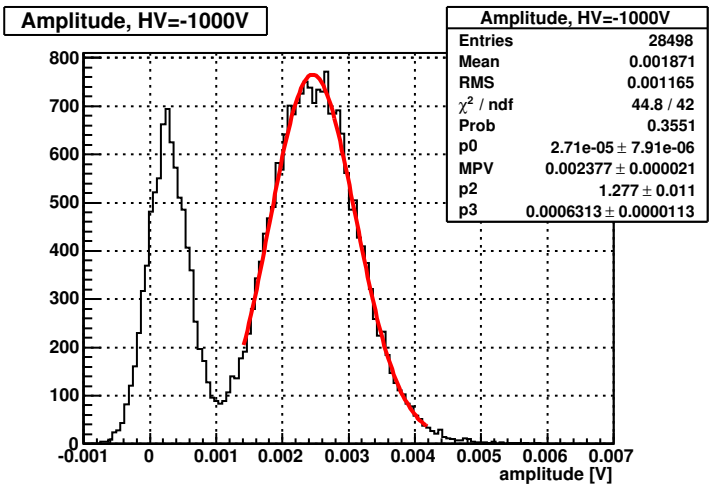


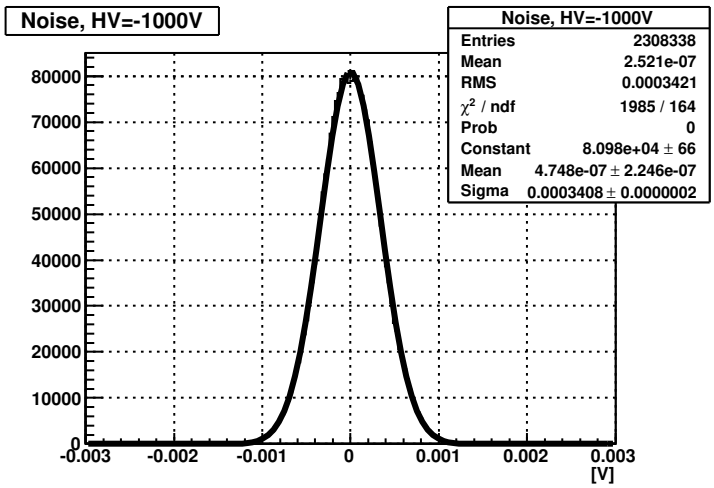

Amplitude, HV=-600V
Amplitude, HV=-600V
Entries 2851
Mean 0.001354
RMS 0.0008286
χ² / ndf 40.75 / 30
Prob 0.09106
p0 1.429e-05 ± 3.961e-06
MPV 0.001673 ± 0.000011
p2 0.1272 ± 0.0031
p3 0.0005007 ± 0.0000137
amplitude [V]


Noise, HV=-600V
Noise, HV=-600V
Entries 230931
Mean 5.464e-08
RMS 0.0003424
χ² / ndf 330 / 122
Prob 0
Constant 8093 ± 20.8
Mean 2.943e-07 ± 7.108e-07
Sigma 0.000341 ± 0.000001
[V]

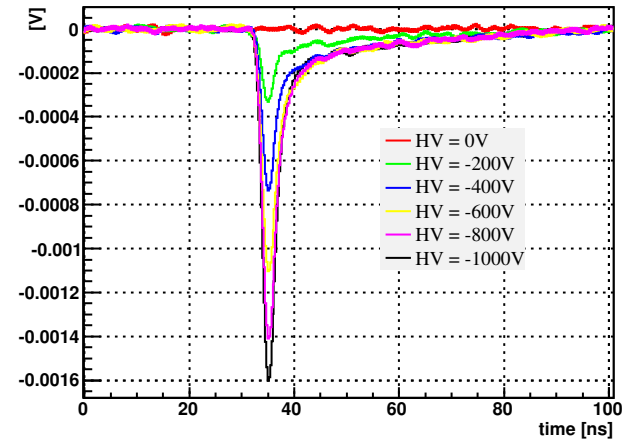

Amplitude, HV=-800V
Amplitude, HV=-800V
Entries 2851
Mean 0.001665
RMS 0.001029
χ² / ndf 55.8 / 35
Prob 0.0142
p0 2.607e-05 ± 2.227e-05
MPV 0.00207 ± 0.00005
p2 0.1258 ± 0.0034
p3 0.0005621 ± 0.0000341
amplitude [V]

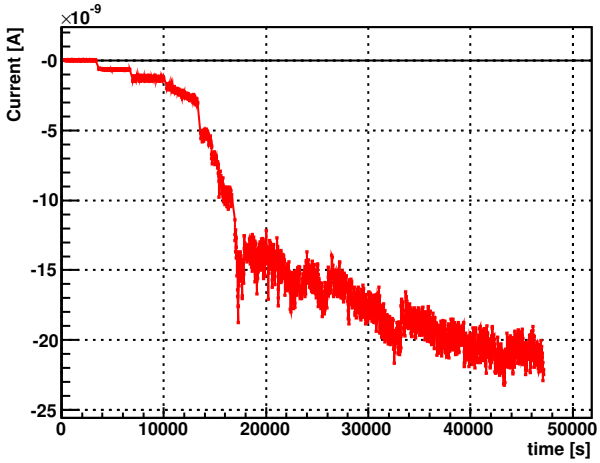

Noise, HV=-800V
Noise, HV=-800V
Entries 230931
Mean 7.431e-08
RMS 0.0003419
χ² / ndf 334.6 / 103
Prob 0
Constant 8095 ± 20.8
Mean 3.236e-07 ± 7.103e-07
Sigma 0.0003409 ± 0.0000005
[V]


Amplitude, HV=-1000V
Amplitude, HV=-1000V
Entries 28498
Mean 0.001871
RMS 0.001165
χ² / ndf 44.8 / 42
Prob 0.3551
p0 2.71e-05 ± 7.91e-06
MPV 0.002377 ± 0.000021
p2 1.277 ± 0.011
p3 0.0006313 ± 0.0000113
amplitude [V]

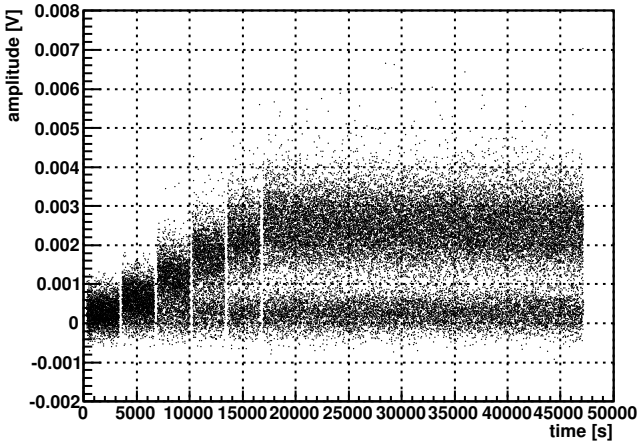

Noise, HV=-1000V
Noise, HV=-1000V
Entries 2308338
Mean 2.521e-07
RMS 0.0003421
χ² / ndf 1985 / 164
Prob 0
Constant 8.098e+04 ± 66
Mean 4.748e-07 ± 2.246e-07
Sigma 0.0003408 ± 0.0000002
[V]

Average event

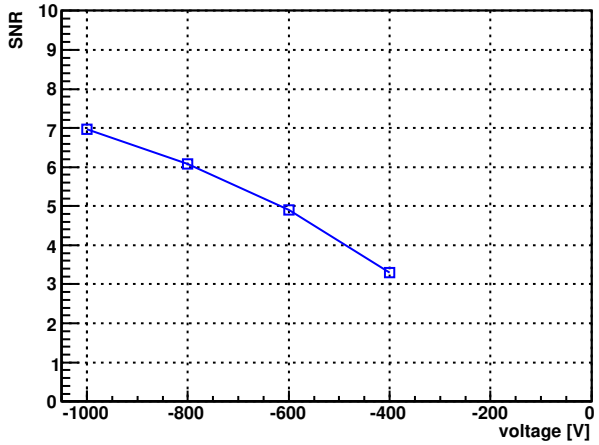




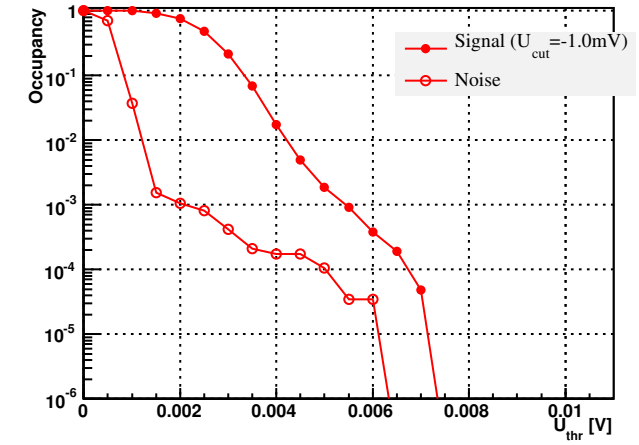
amplitudes



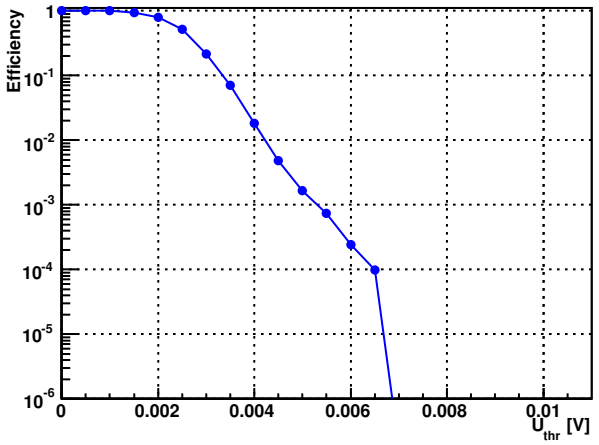
Signal to noise

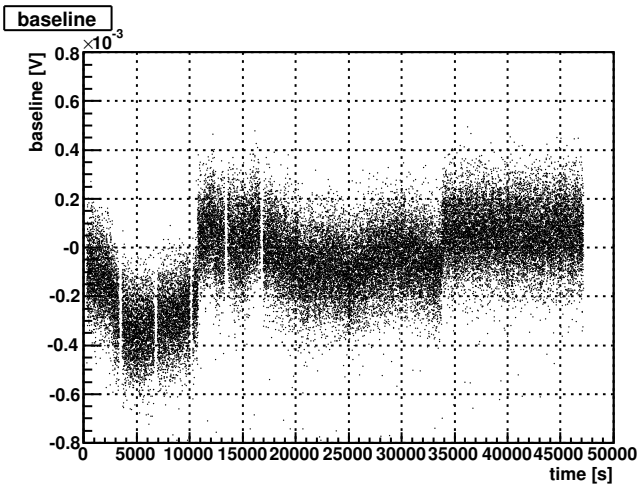


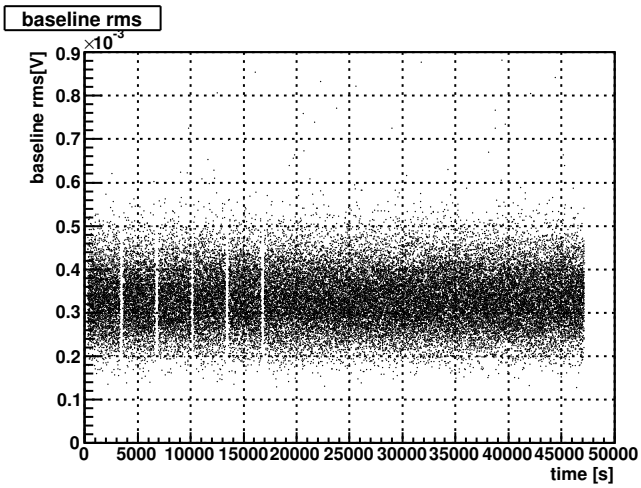
Occupancy vs Threshold, HV=-1000V

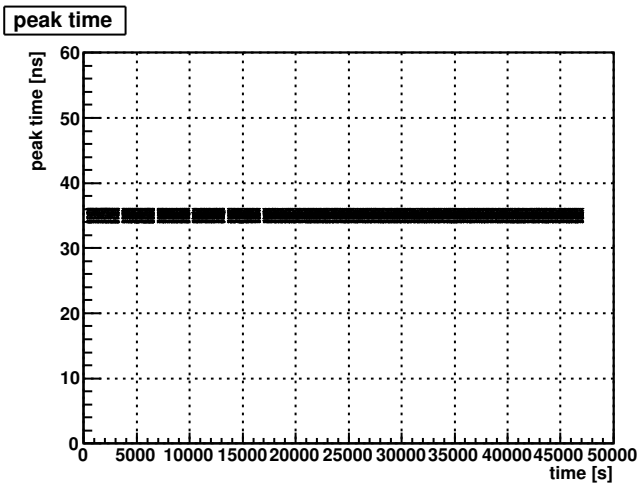


Efficiency vs Threshold, HV=1000V, U_{cut}=-1.0mV




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 30000 35000 40000 45000 50000
time [s]


baseline rms
baseline rms[V]
×10⁻³
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000
time [s]


peak time
peak time [ns]
60
50
40
30
20
10
0
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000
time [s]

Data File = SP_060323142522_Fotec408_A382-11_A382-8_measurement3.xls
Upper Diamond = A382-11
Lower Diamond = A382-8
Maček ceramic Ass. #1
resistor changed: 150Ω → 130Ω