Figure 12. Threshold R/Q, tracking vs calculation(350 mA, 1.2 MV)

Correspond 3HC  $R/Q(\Omega)$  @64.5 ps

<b>5HC (Ω)</b>	0	1	2	3	4	5	6	7	8/8
tracking	22		16.5		10.5		5		0
calculation	22	19	16.5	13.5	10.5	8	5	2.5	0.1

Correspond 3HC  $R/Q(\Omega)$  @40 ps

5HC (Ω)	0	3	6	9	12	15	18	21	24/24.5
tracking	55		40		26		12.5		0
calculation	55.5	47.5	40	33	26	19.5	13	6.5	0.1

Correspond 3HC  $R/Q~(\Omega)~$  @30~ ps

	5HC (Ω)	0	4	8	12	16	20	24	28	32	37	42
R/	tracking	96.5		85		75.5		68		63.5		59.5
3	calculation	99	92	86	80.5	76	72	69	66	64	62	60

Figure 13. Threshold R/Q,  $I_0$ =100 mA (1.2 MV)

Correspond 3HC  $R/Q(\Omega)$  @64.5 ps

5HC (Ω)	0	3	6	10	14	18	23	27.5
calculation	76	67.5	59.5	48	37	25.5	11.5	0.1

Correspond 3HC  $R/Q(\Omega)$  @40 ps

5HC (Ω)	0	20	30	40	50	60	70	80	84.5
calculation	194	142.5	118.5	95	72.5	50.5	29.5	9	0.1

Correspond 3HC  $R/Q(\Omega)$  @30 ps

5HC (Ω)	0	15	30	45	60	75	90	105	120	135	150
calculation	345	319.5	297	277.5	261	247.5	236	227	219.5	214	209.5

Figure 14. Threshold R/Q with 2 and 3HCs (350 mA, 1.2 MV)

Correspond 3HC  $R/Q(\Omega)$  @92 ps

5HC (Ω)	0	2	4	6	8	10.5
calculation	25.5	20.5	15.5	10.5	5.5	0.1

Correspond 3HC  $R/Q(\Omega)$  @50 ps

5HC (Ω)	0	7	14	21	28	35	42	46
calculation	94.5	78	62.5	48	33.5	20	7	0.1

Correspond 3HC  $R/Q(\Omega)$  @40 ps

5HC (Ω)	0	10	20	30	40	50	60
calculation	149.5	132.5	116.5	102.5	90	78.5	68.5

Figure 15. Threshold R/Q,  $V_{mc}$ =1.5 MV vs  $V_{mc}$ =1.8 MV (350 mA)

Correspond 3HC  $R/Q(\Omega)$  @64.5 ps

5HC (Ω)	0	1	2	3	4	5	6	7	8.5
$V_{mc}$ =1.5 MV	24.5	21.5	19	16	13	10	7	4	0.1

Correspond 3HC  $R/Q(\Omega)$  @64.5 ps

5HC (Ω)	0	1	2	3	4	5	6	7	8.5	9.5
$V_{mc}$ =1.8 MV	27	24	21	18	15	12	9	6	1.5	0.1

Figure 16. Threshold R/Q, higher voltages vs lower voltages (350 mA, 1.2 MV)

Correspond 3HC  $R/Q(\Omega)$  @50 ps

5HC (Ω)	0	2	4	6	8	10	12	13	14.5
Higher voltages	36	30.5	24.5	19	13.5	8.5	3	0.1	
Lower voltages	38	32.5	27	21.5	16.5	11	6		0.1

Correspond 3HC  $R/Q(\Omega)$  @45 ps

5HC (Ω)	0	4	8	12	16	17	20	24	26
Higher voltages	44	33	22	12	2	0.1			
Lower voltages	47.5	37.5	29	21	14		8	2.5	0.1