

CPRI

TEST REPORT



Central Power Research Institute

(A Govt. of India Society,
P.B. No. 8066, Sadashivanagar, S.P.O.
Prof. Sir. C.V. Raman Road,
Bangalore - 560 080



CPRI

HIGH VOLTAGE DIVISION
CENTRAL POWER RESEARCH INSTITUTE
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Phone: + 91(0) 80-23601917 Fax: +91 (0)80 - 23601213

Sheet 1 of 3

TEST REPORT

Test Report Number : HV/1(ICG)/10/8549/SECOM **Dated:** 27-09-2010.

Name & Address of the customer : M/s. Secom Services India Private Limited,
No.B-359/1, Chirag Delhi,
New Delhi – 110 017.
Ref. Your Letter No. Nil dated: 24- 09-2010.

Name & Address of the Manufacturer : M/s. TERCEL ZEUS
98, Glengariff Dve,
Floreat WA – 6014,
Australia.

Particulars of Samples tested
Condition of the sample on Receipt New.

Type : ESE ZEUS TZ 63
Designation : ESE Lightning Conductor Air Terminal
Serial Number : Z019ES88F05B011
Number of samples tested : One.
Date(s) of Test(s) : 25-09-2010.
CPRI Sample Code Number : HVML2010S0983.

Particulars of tests conducted : Impulse Current Test 8/20 μ s At 40 kA.

Test in accordance with standard/ Specification. : As per Customer's Request.
Sampling Plan : Not Applicable

Customer's requirement : Five positive and Five negative impulse shots of 8/20 μ s 40kA may be applied. Sample to be checked for physical deformation.

Deviations if any : Nil.

Name of the witnessing persons

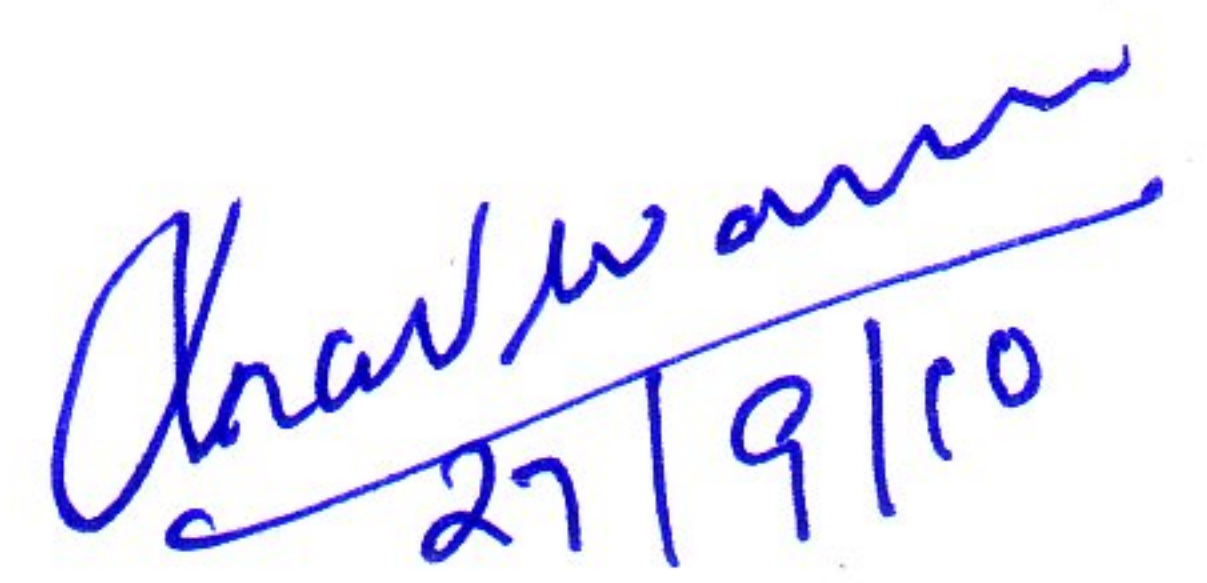
Customer's representatives : Shri. S.S.Nayak, Manager,
Other than client's representatives : None.
Test subcontracted with Address of the laboratory : None.

Documents constituting this report (in words)

Number of sheets : Three.
Number of oscillogram/s : Ten.
Number of graphs : Nil.
Number of photo/s : Nil.
Number of Test Circuit Diagrams : Nil.
Number of drawings : One.(TZ 63)


(M.KANYAKUMARI)
Test Engineer




(P.V.VASUDEVAN NAMBUDIRI)
Additional Director

AUTHORISED SIGNATORIES



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Sheet 2 of 3

Test Report No. HV/1(ICG)/10/8549/SECOM

Dated: 27-09-2010.

TEST PROCEDURE

Five Positive & five negative 8/20 μ S 40KA impulse current shots were applied to sample between L&N terminals shown in drawing. The sample was checked for physical deformation and degradation.

CURRENT WITHSTAND TEST

Current (8/20 μ S) withstand test on ESE Lightning Conductor Air Terminal:

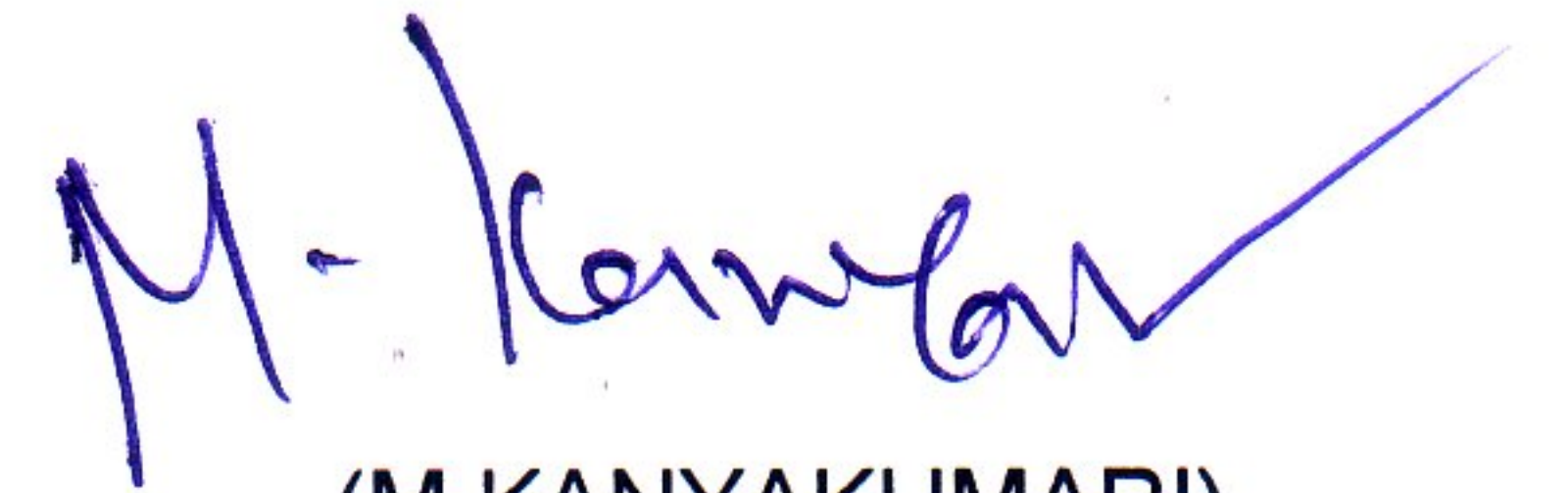
Sample No.	Polarity	Current Applied (kA)	Osc. No
1	+ Ve	40.2	6918
		40.2	6919
		40.3	6920
		40.2	6921
		40.1	6922
	- Ve	39.9	6913
		40.1	6914
		40.2	6915
		40.2	6916
		40.2	6917

Observations:

1. No visual deformation/mechanical degradation of the external parts of the ESE Lightning Conductor Air terminal system was observed.

Laboratory Atmospheric conditions during the above tests.

Temperature in Degree Celsius			Atmospheric Pressure in mm of Hg.
Date	Dry Bulb	Wet Bulb	
25-09-2010	25.0	21.0	681.0


(M.KANYAKUMARI)
Test Engineer



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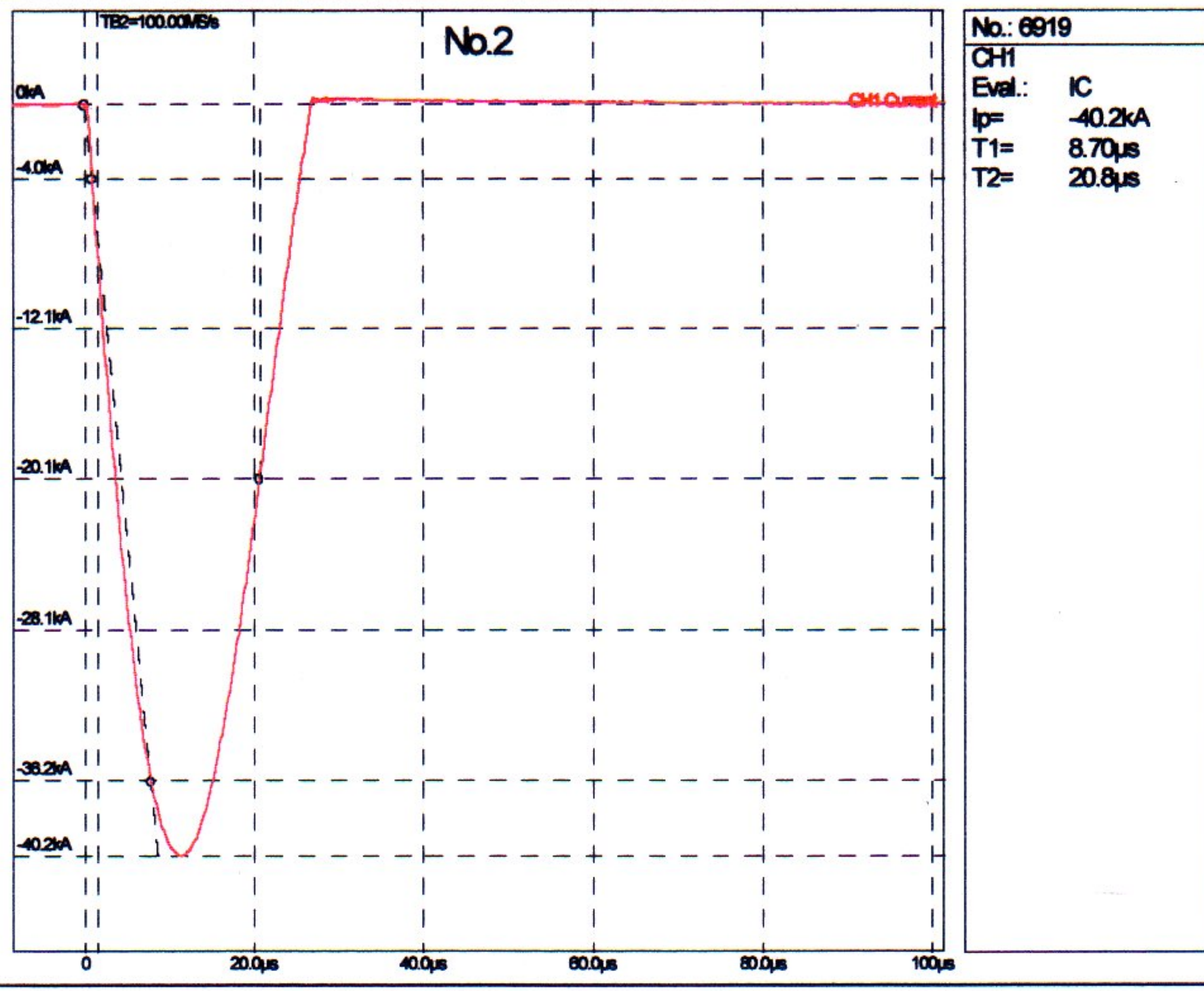
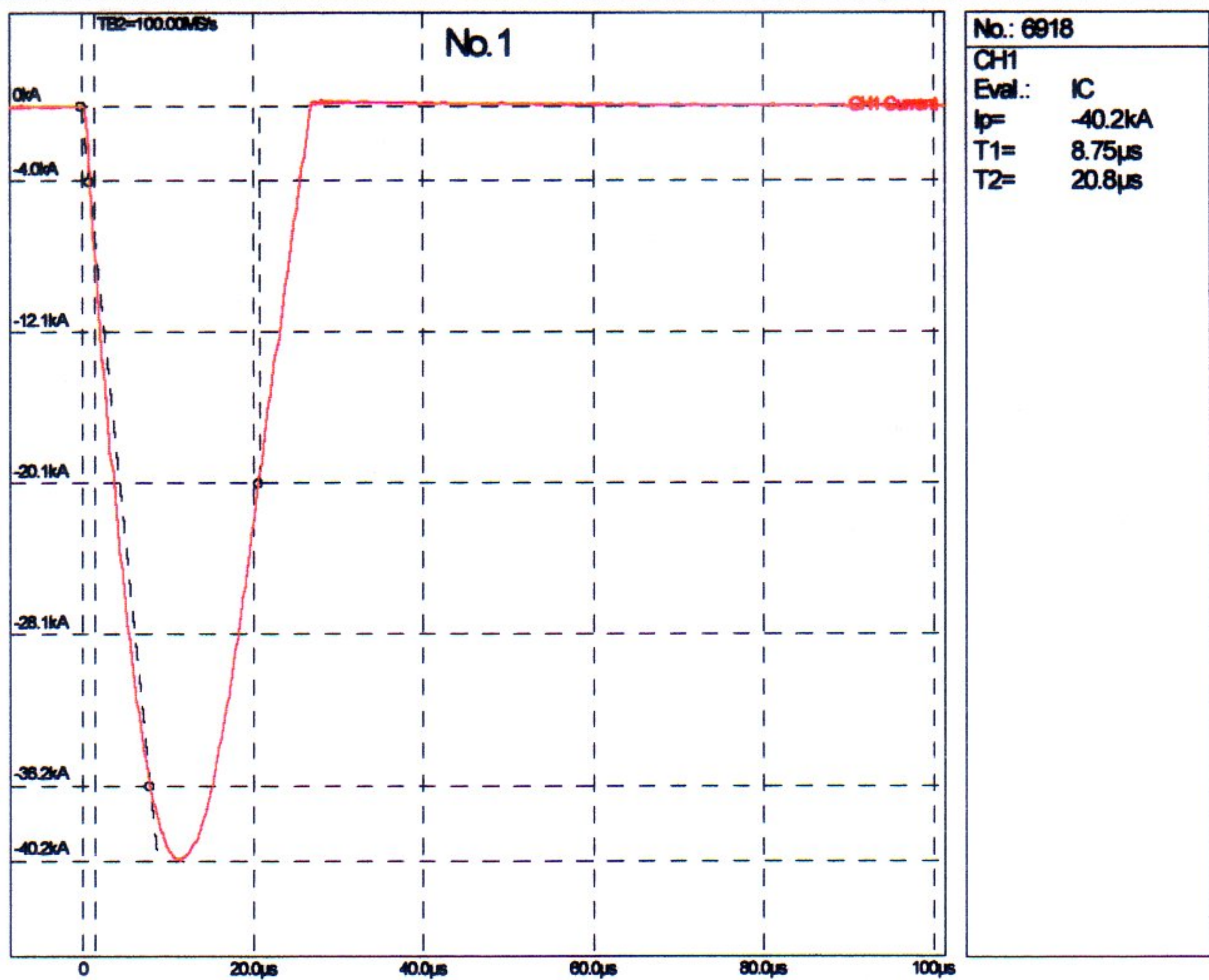
Dated: 27-09-2010.

NOTE

- a) The test results relate only to the item(s) tested.
- b) Publication or reproduction of this test report/certificate in any form other than by complete set of the whole report and in the language written is not permitted without the written consent of CPRI.
- c) Any corrections/erasure invalidates this test report/certificate.
- d) Any anomaly/discrepancy in this test report/certificate should be brought to our notice within 45 days from the date of issue.
- e) The verification of the sample drawings by CPRI is limited to dimensional checks only wherever possible.

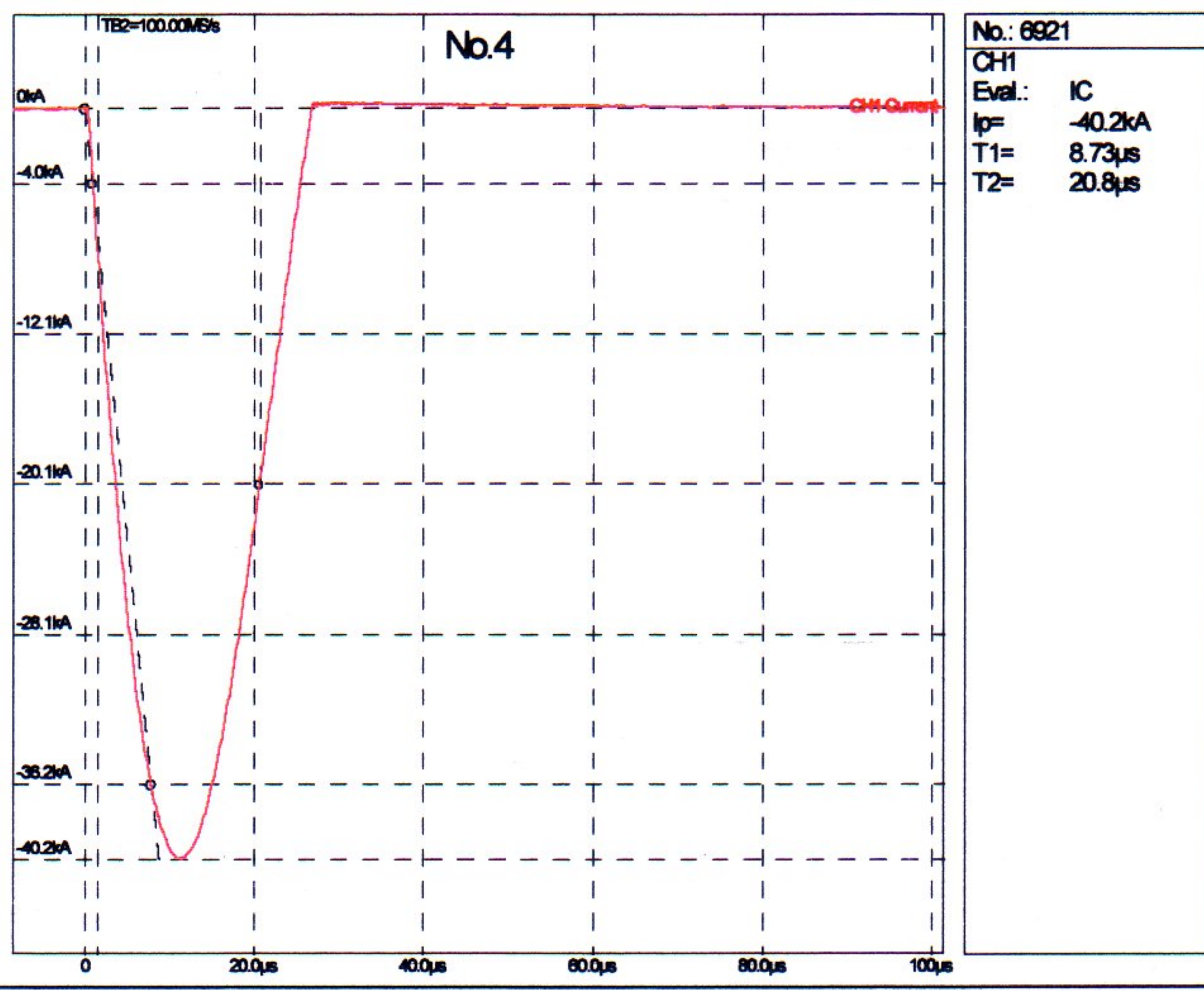
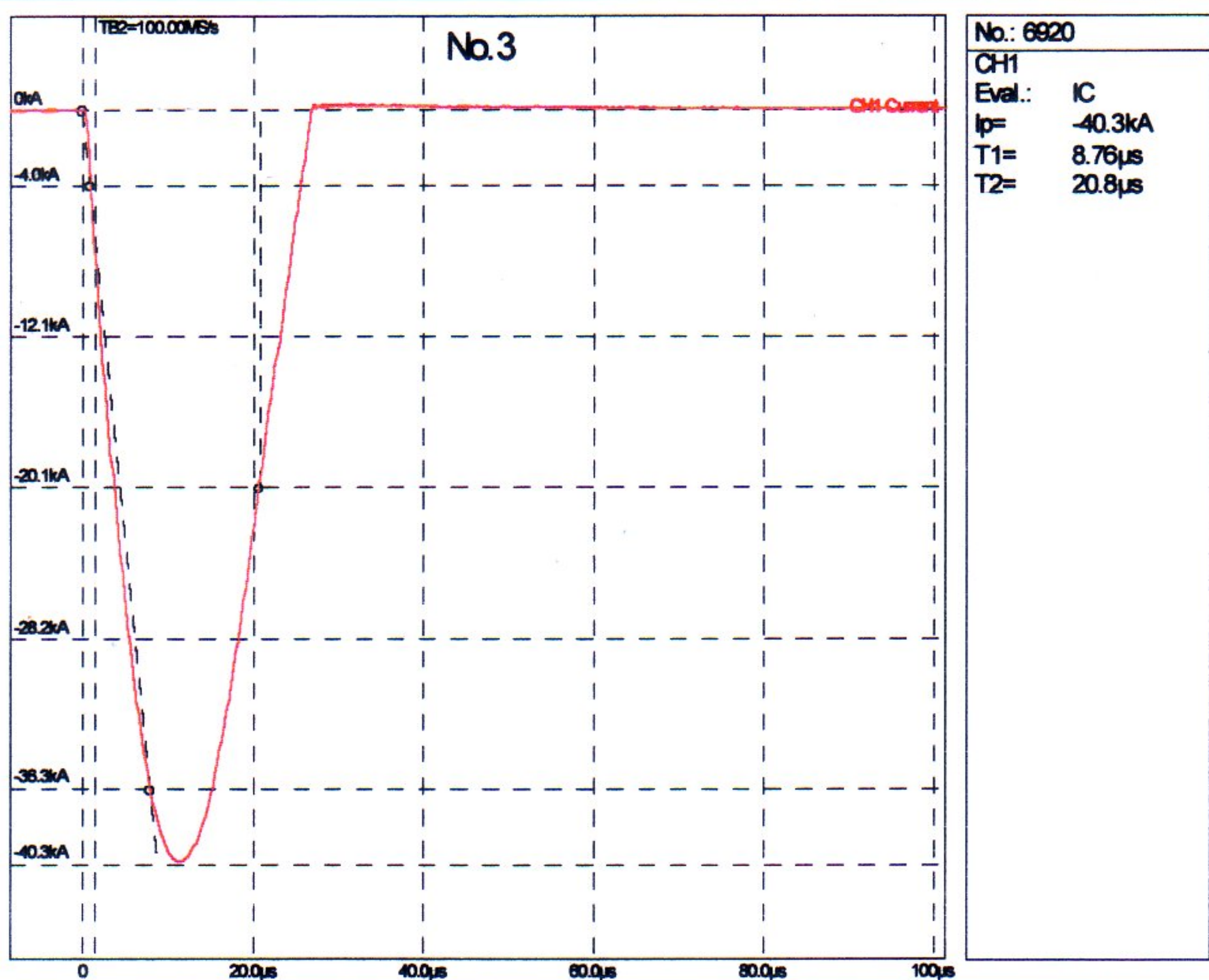
(M.KANYAKUMARI)
Test Engineer

Lightning Impulse Current (8/20μS) - Positive Polarity



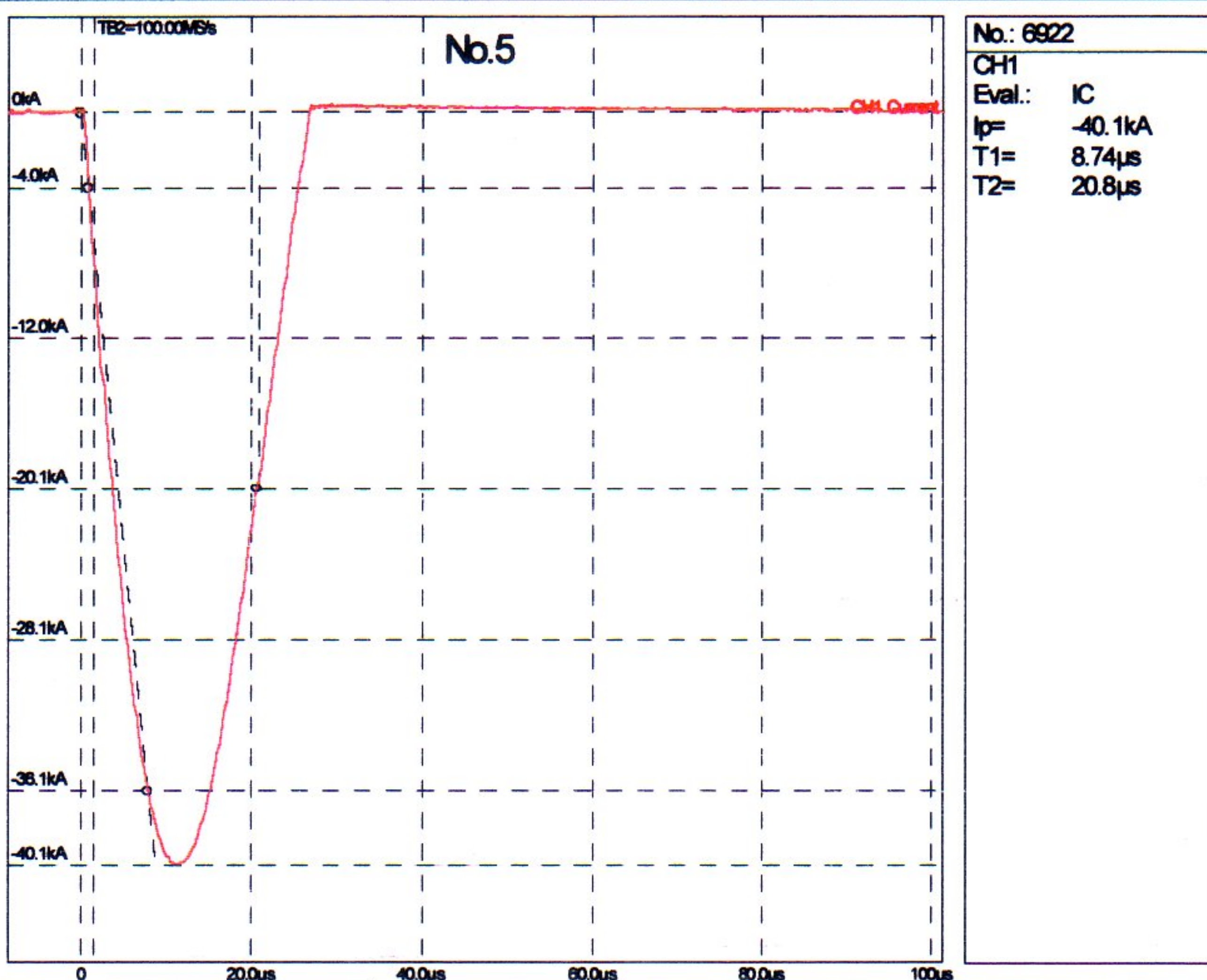
Shot No.1

Shot No. 2



Shot No.3

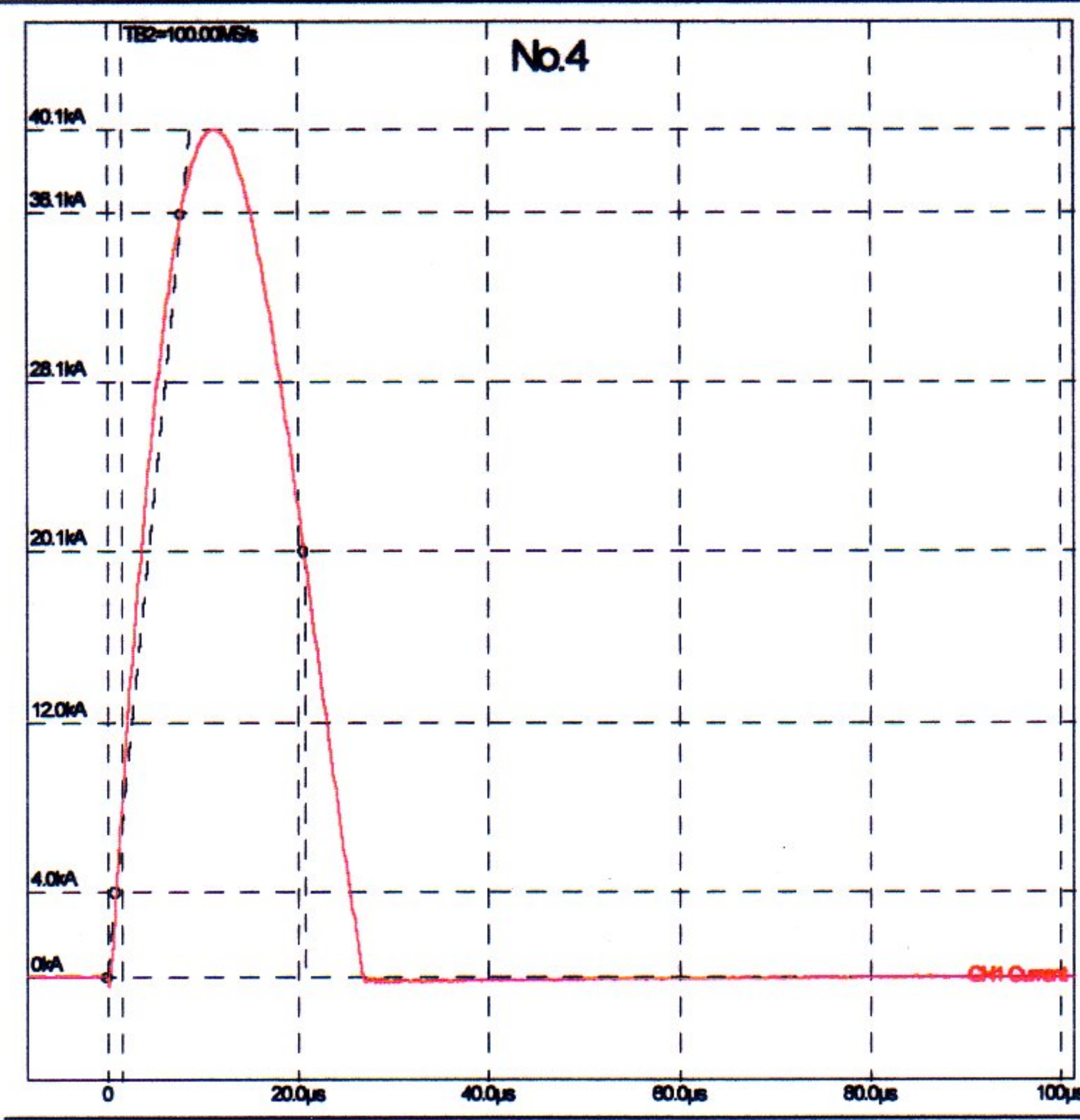
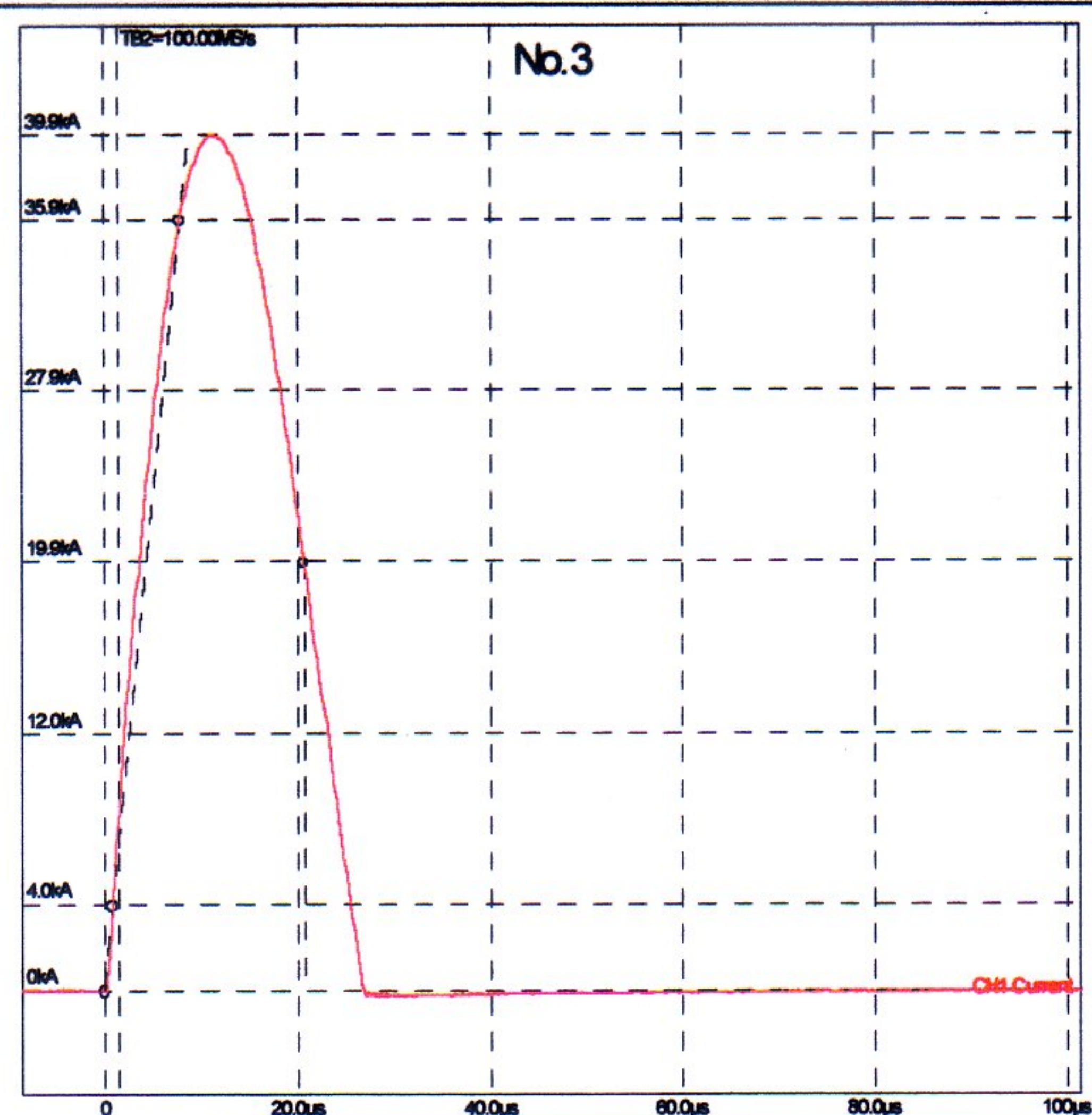
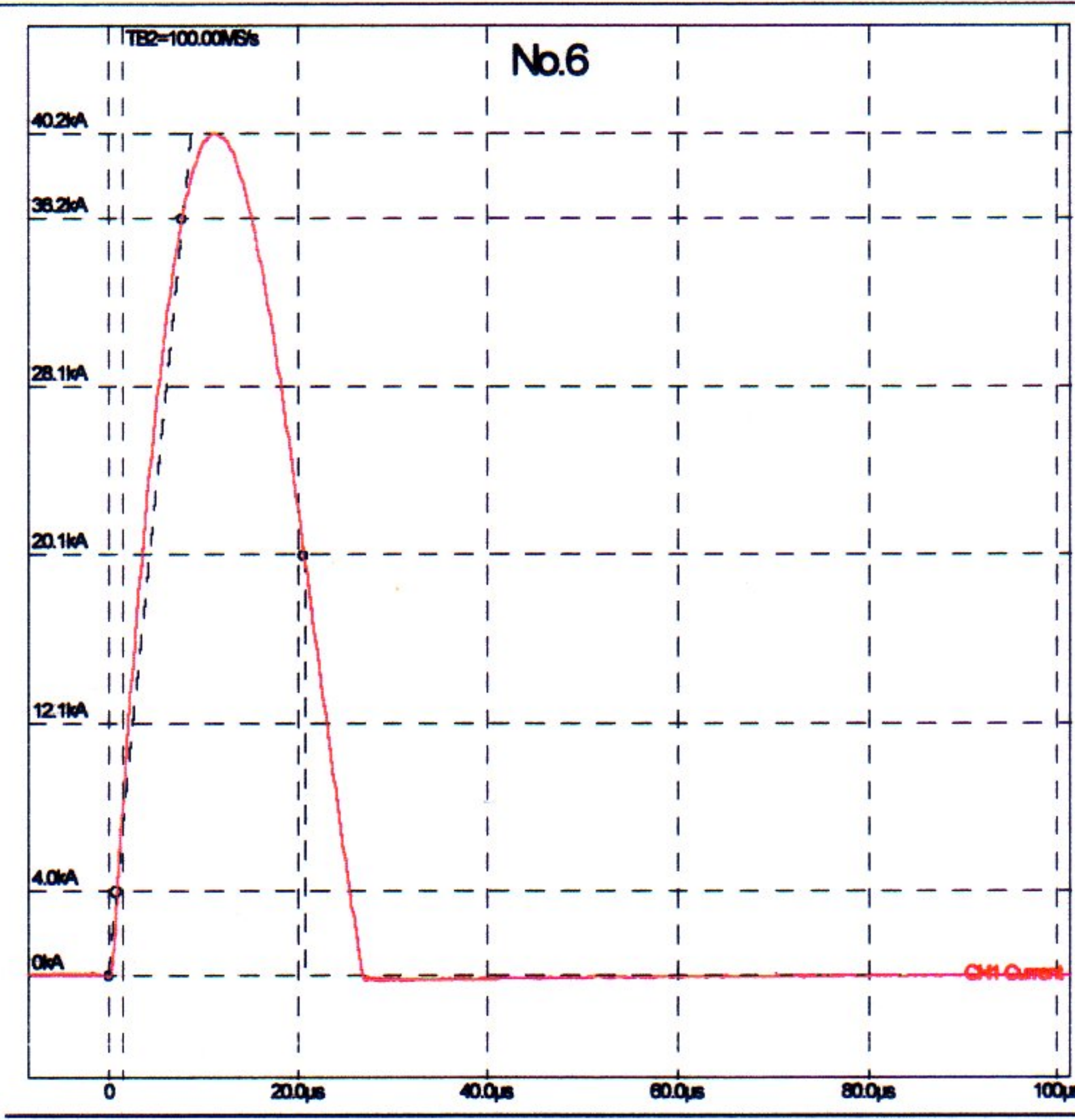
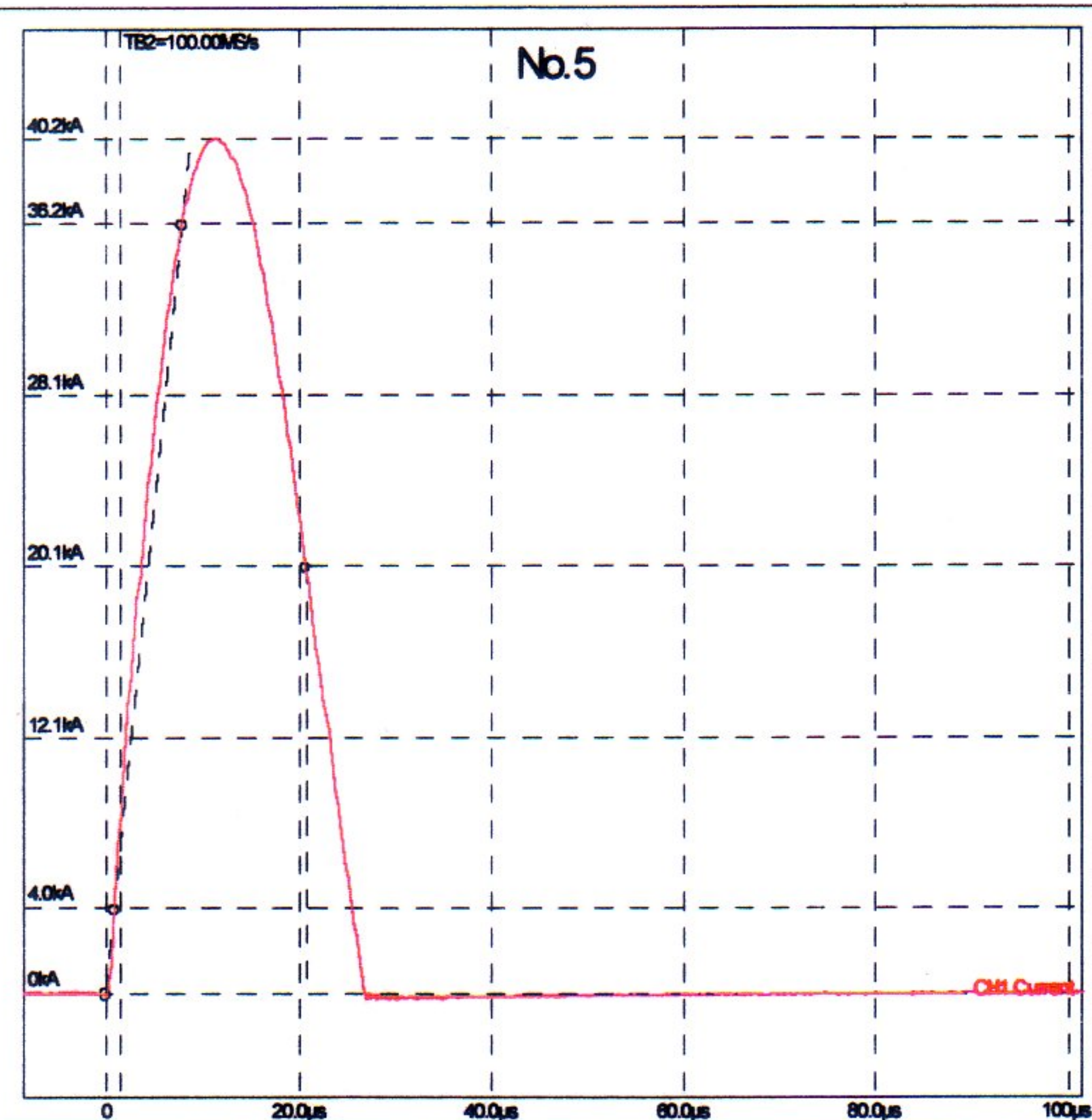
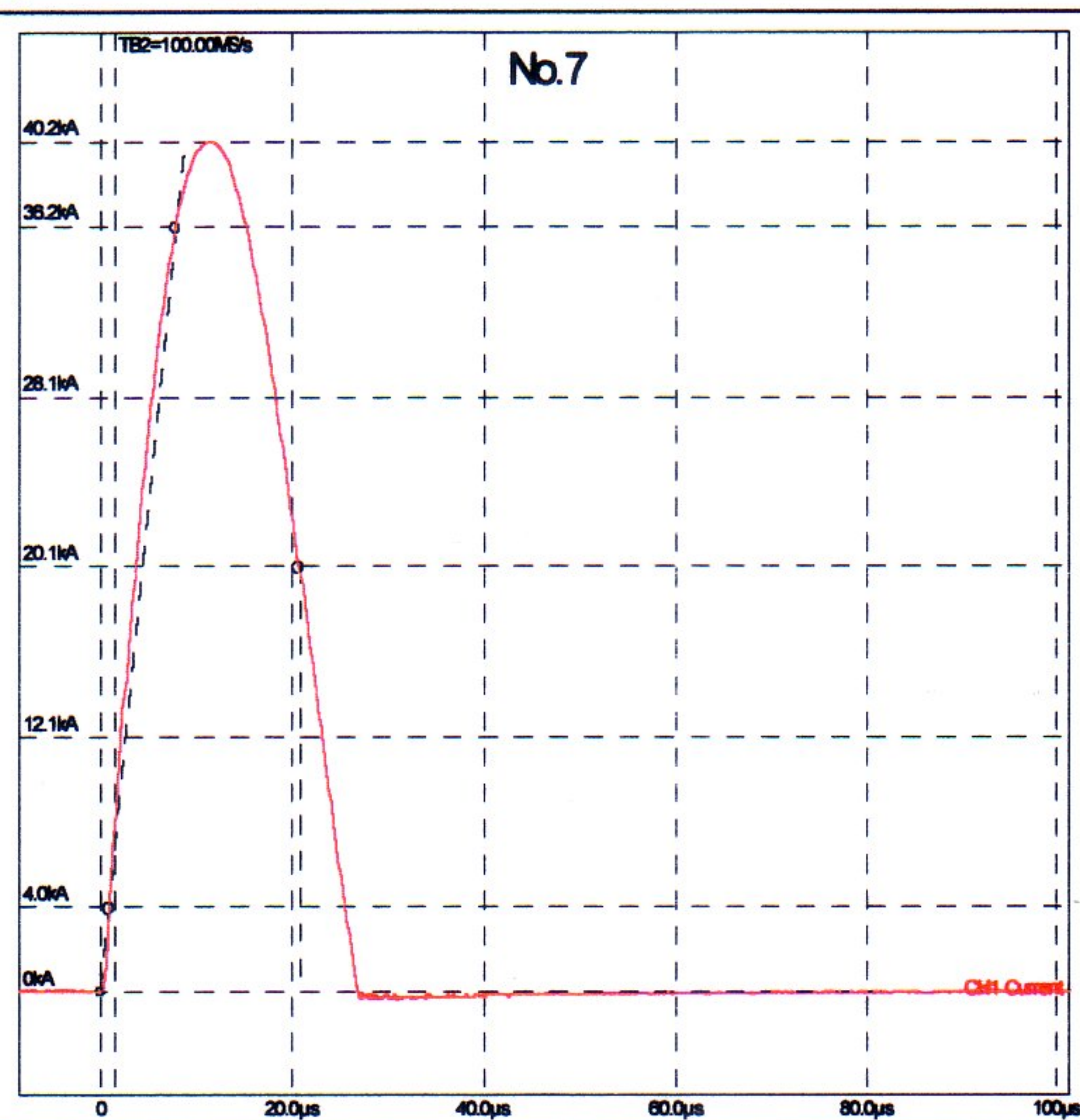
Shot No. 4



Shot No.5

M. Kanya Kumari

(M.KANYA KUMARI)
TEST ENGINEER

Lightning Impulse Current (8/20 μ S) - Negative Polarity**Shot No.1****Shot No. 2****Shot No.3****Shot No. 4****Shot No.5**

M. Kanya Kumari
(M.KANYA KUMARI)
TEST ENGINEER

Tercel Zeus
98, Glengariff Dve,
Floreat WA-6014
Australia.

TZ 63

इंजीनियरी अधिकारी
ENGINEERING OFFICER
सी पी आर आई/CPRI
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M. Jambur

