

4. Square wave response

* Summary

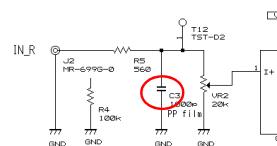
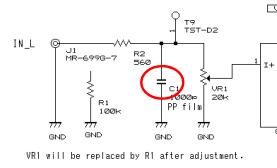
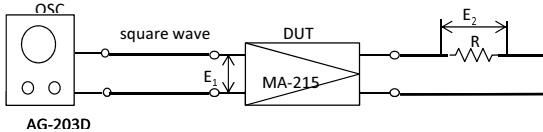
Square wave response is measured at 100, 1k, 10k and 100kHz.
The amplitude at output is 4Vp-p

* Apparatus

DUT: MA-215 w/o side panels
Digital oscilloscope: Pico Technology PicoScope 4262 + Lenovo ThinkPad X121e + 1:10 probes
Oscillator: Kenwood AG-203D
Short plug
Dummy load R: 8 ohm x2

* Condition

The other input of DUT is short to ground.
Dummy load is used.
Level adjusters of DUT are set to be max.
Input filter is removed (C1, C3 are removed).
Input waveform is observed on Main Board.



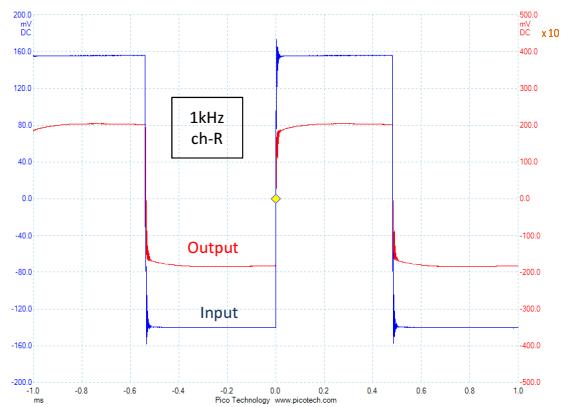
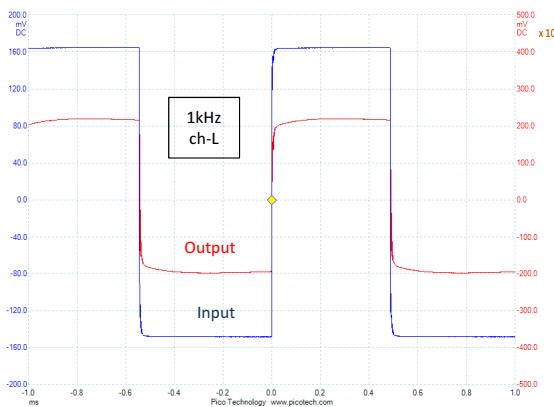
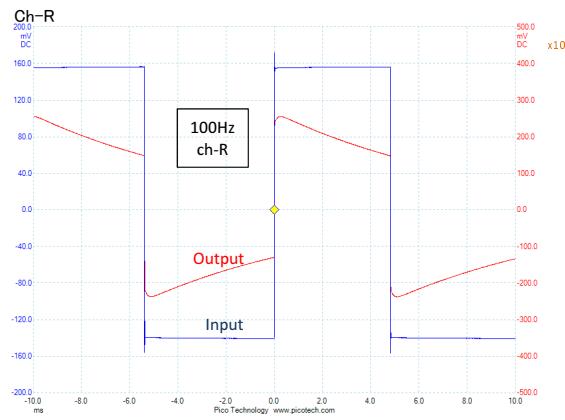
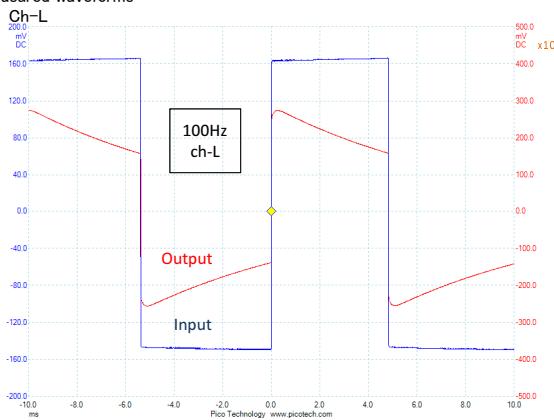
* Procedure

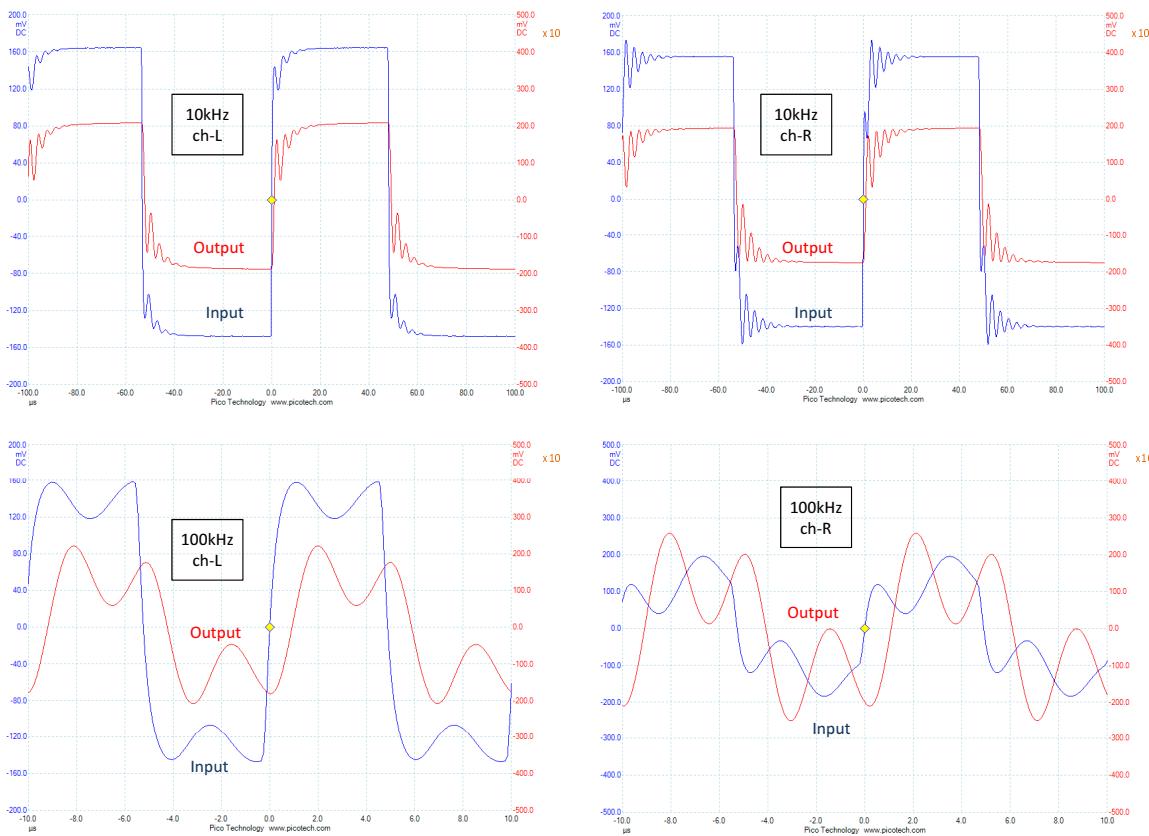
1. Turn on DUT w/level adjustors minimized.
Wait 5 min. to warm up DUT.
2. Set level adjustors of DUT max, and adjust oscillator's output level so that the output of DUT becomes 4Vp-p
3. Observe waveform and save it on disk.

* Ambient

Date: 2015/7/22	Time: 11:00
Weather: Clear	
Mains: 103.2 [V]	T _A : 28 [deg C]

* Measured waveforms





* Condition (2nd measurement)

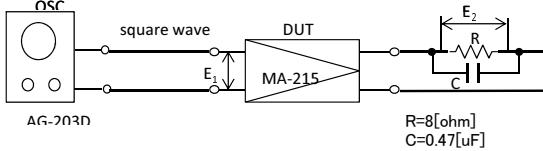
The other input of DUT is short to ground.

Dummy load R paralleled w/ C is used.

Level adjusters of DUT are set to be max.

Input filter is removed (C1, C3 are removed).

Input waveform is observed on Main Board.



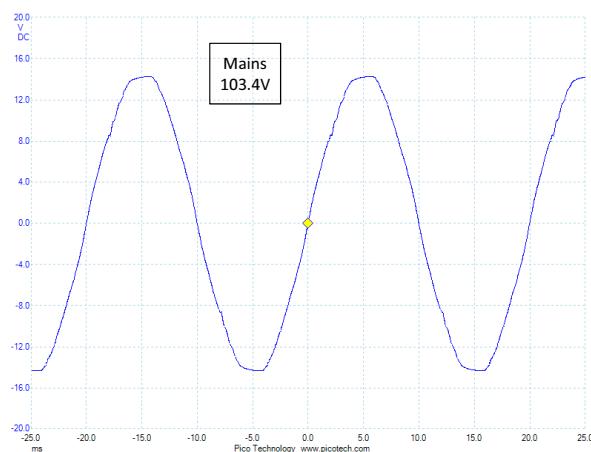
* Ambient

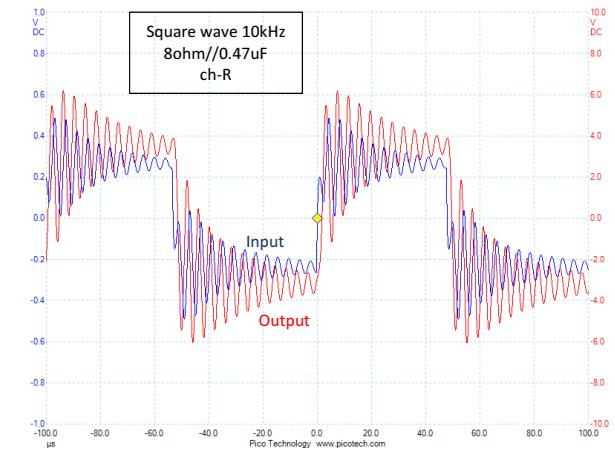
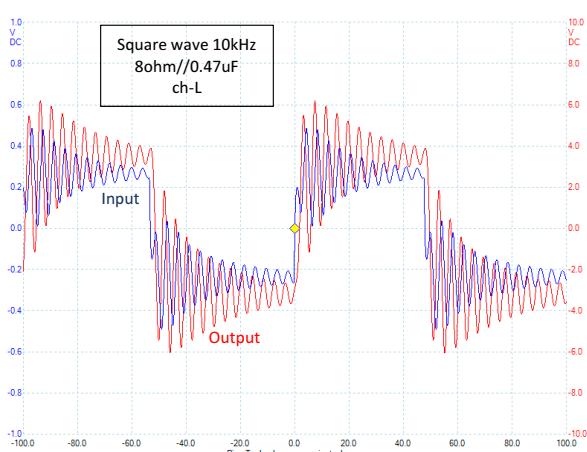
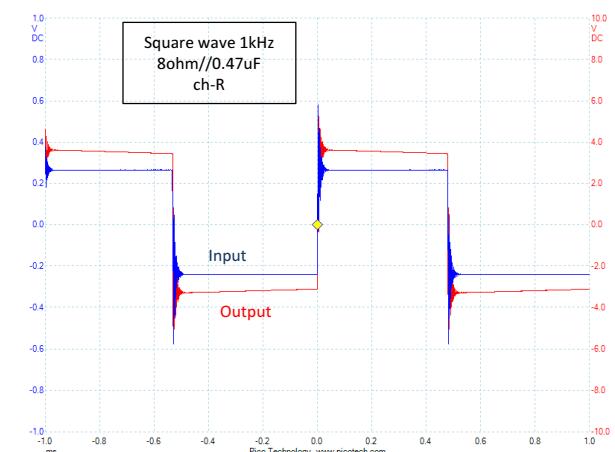
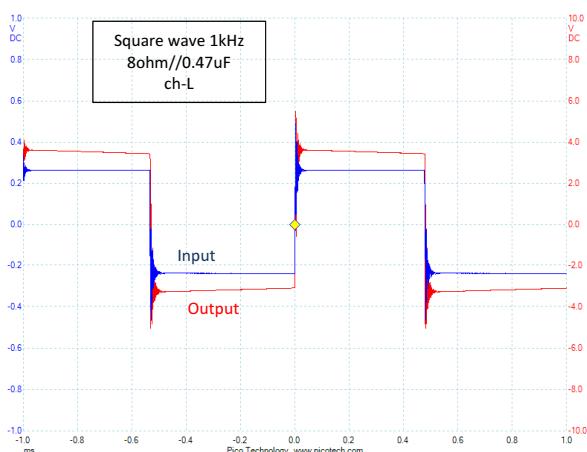
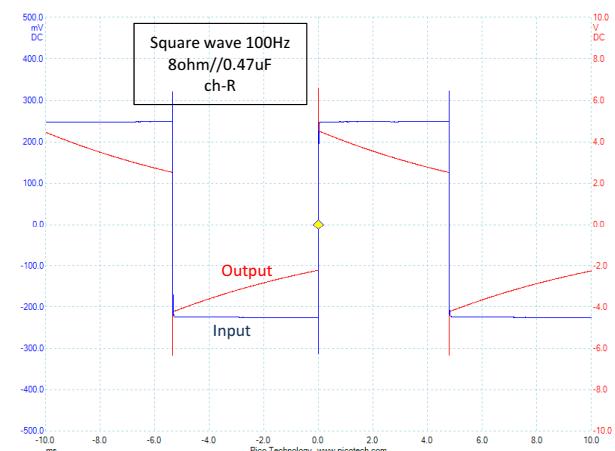
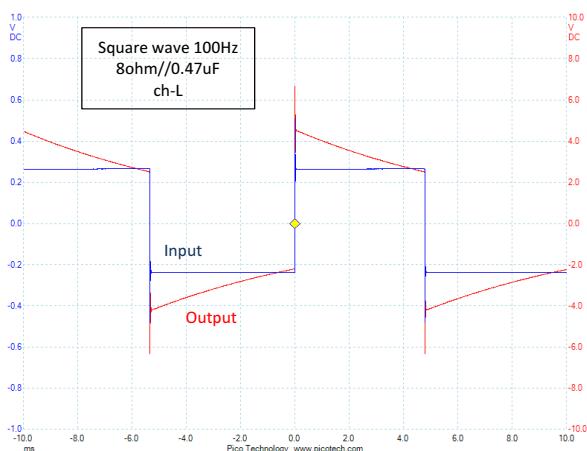
Date: 2015/8/3
Weather: Sunny
Mains: 103.4 [V]

Time: 11:00
 $T_A: 28$ [deg C]

* Measured waveforms

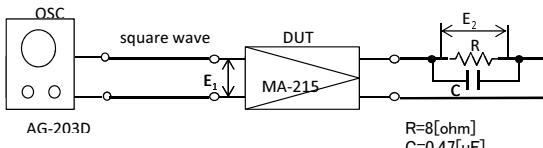
$$V_m = 266 \text{ [mV}_\text{peak}\text{]} \quad V_{\text{out}} = 3.636 \text{ [V}_\text{peak}\text{]}$$





* Condition (3rd measurement)

The other input of DUT is short to ground.
 Dummy load R paralleled w/ C is used.
 Level adjusters of DUT are set to be max.
 Input filter is removed (C1, C3 are removed).
 Input waveform is observed on Main Board.
 Probe for E_2 is not grounded.

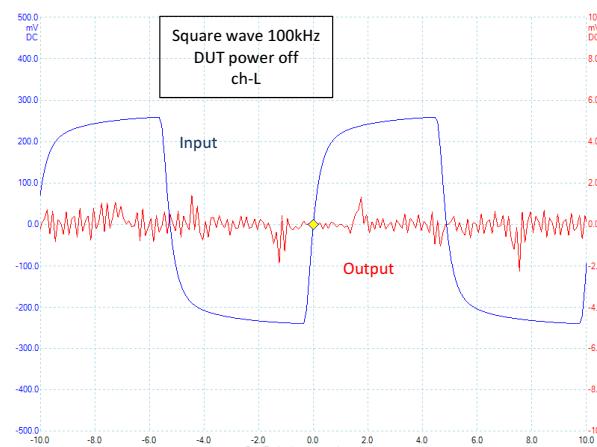
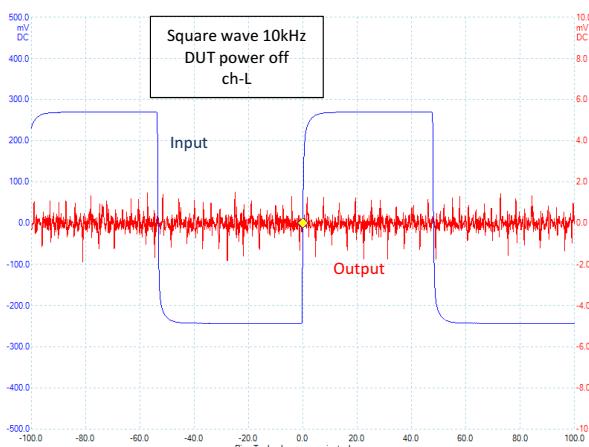
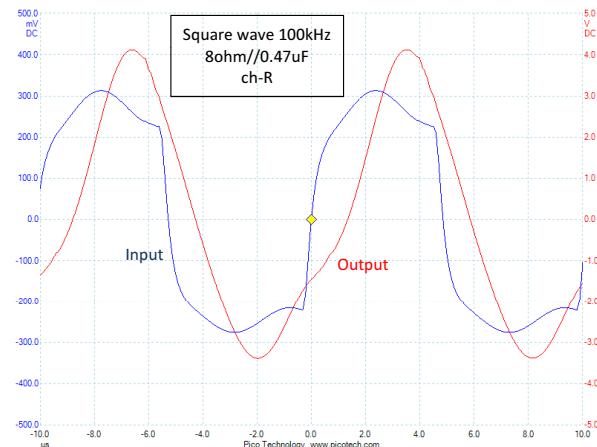
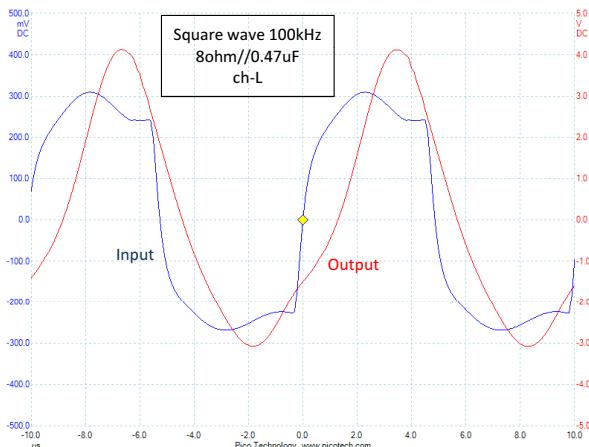
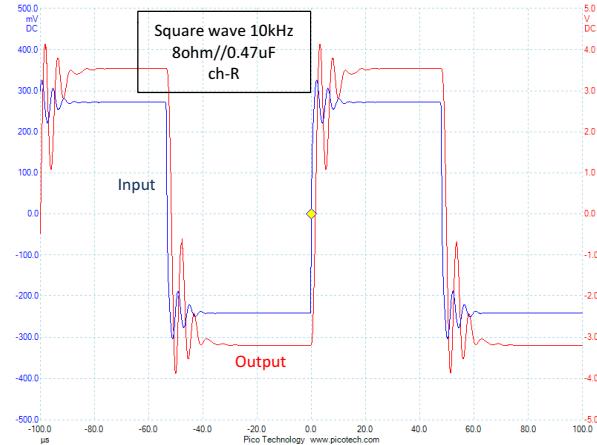
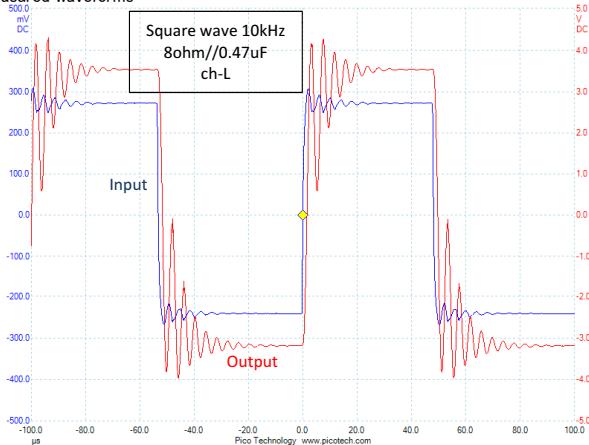


* Ambient

Date: 2015/8/4
 Weather: Sunny
 Mains: 103.0 [V]

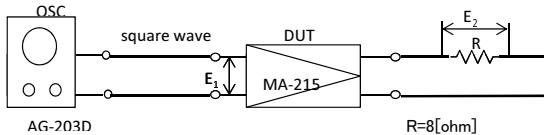
Time: 14:55
 $T_A: 29 [\text{deg C}]$

* Measured waveforms



* Condition (4th measurement)

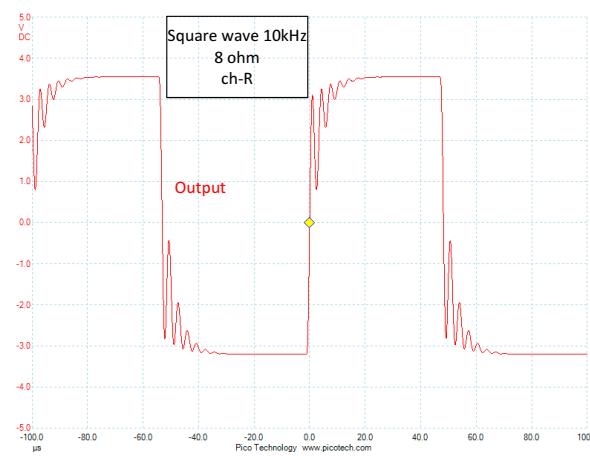
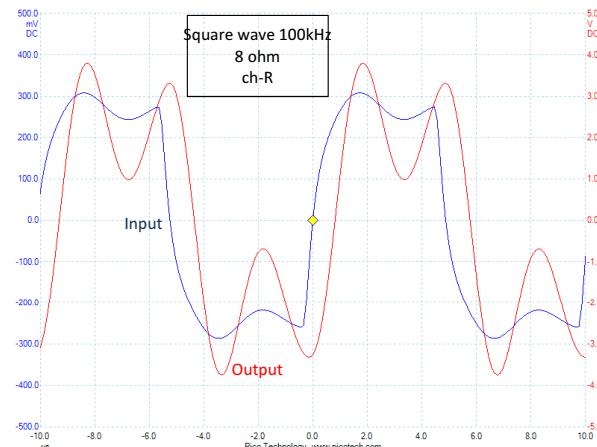
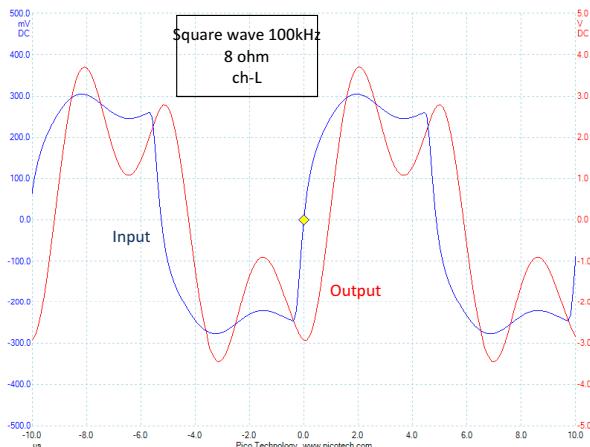
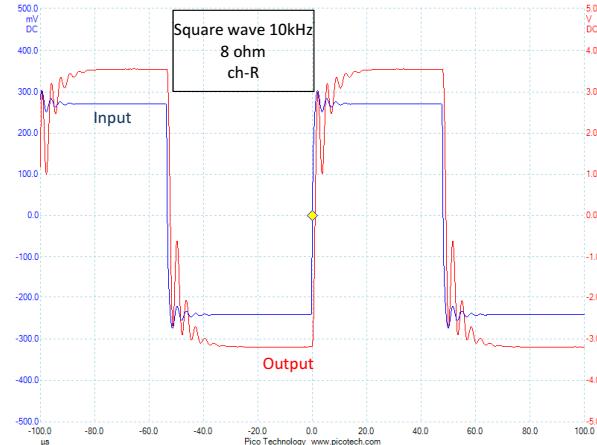
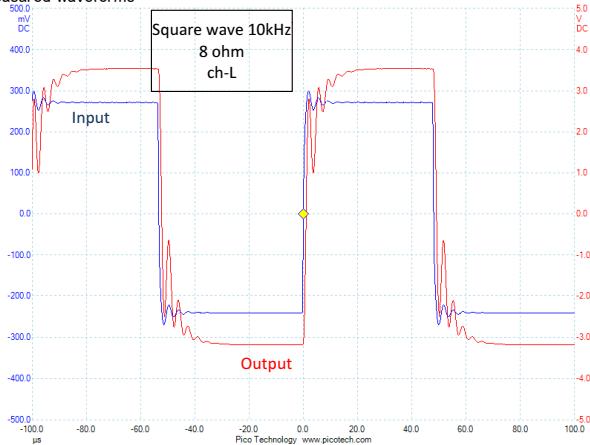
The other input of DUT is short to ground.
Dummy load R (8ohm) is used.
 Level adjusters of DUT are set to be max.
 Input filter is removed (C1, C3 are removed).
 Input waveform is observed on Main Board.
 Probe for E_2 is not grounded.



* Ambient

Date: 2015/8/4 Time: 15:30
 Weather: Sunny $T_A: 29$ [deg C]
 Mains: 103.0 [V]

* Measured waveforms



END OF THIS SHEET