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ALGORITHM OF SETTING THE CONFIGURATION OF THE CLOSED LOOPS OF THE MATRIX SWITCH

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A matrix switch connects the electrodes of a semiconductor device (SD) with the proper inputs and outputs of the testing system. Bridging the commutation matrix points provides the connection of the measuring devices to the SD electrodes for the time of the test of the programmed sequence. Consider that these measurements are time consuming and expensive, speeding up the preparation of an automated measuring complex for carrying out measurements is very important.

The using of the matrix switch with the IPPP-1 meter, which contains 1-4 meter-sources (MS), allows to automate the measurement of SD parameters,

thanks to the use of a personal computer (PC), which is a part of the IPPP-1 and can be used to control switchboard.

The algorithm for the configuring of the closed loops of the matrix switch includes the following operations:

1. The installation of the SD type, according to which the measuring circuit of the selected test is showed on the (AIK) display.
2. Specifying of the names of the testing object loops.
3. Setting the switch ports to which these loops are connected.

Till the present time, the information about the testing ports of the switch to which the loops of the selected object are connected was not indicated on the measurement circuits, because the meter and the switch were two independent devices. The proposed algorithm does not require the compilation and the following analysis of the measuring circuits of the formed test to determine the switch loops that should be closed. That increase the efficiency of the formation of the tests when programming (AIC) and significantly simplifies the conception of the switch.

The algorithm also includes the specifying of the type of the test and measure the signals for each SD electrode and installing, in an arbitrary order, the essential parameters of the formed test, corresponding to each of the electrodes of the testing object according to the measurement circuit on the (AIK) display.