

4263A-04

S E R V I C E N O T E

SUPERSEDES: None

4262A LCR Meter

Serial Numbers: 0000A00000 / 9999Z99999

External voltage/current will damage the LCR meter

Situation:

External voltage/current must not be applied to the LCR meter's UNKNOWN terminals directly. Doing so will damage the LCR meter.

For example, the charged capacitor must not be connected to the UNKNOWN terminals because the energy charged in the capacitor will damage the meter. The capacitor must be discharged fully before measuring it with the LCR meter.

Especially, the HP 4263A is widely used for measuring the large electrolytic capacitors. And the discharge is very important not to damage the meter, because the energy charged in the capacitor is proportion to the capacitance value.

Continued

DATE: July 1995

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
INFORMATION ONLY		
AUTHOR:	ENTITY:	ADDITIONAL INFORMATION:
YM	3355	

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NOTE

The capacitor manufacturers charge the capacitors for the DC leakage current test before measuring the capacitance with the LCR meter. Normally, the charged capacitor is fully discharged before measuring its capacitance with the LCR meter.)

Solution/Action:

This kind of trouble is caused by the customer's mis-operation or the problem in the customer's measurement system. It is very important to prevent the recurrence of the trouble.

To avoid the recurrence of the trouble, if you find that the trouble is obviously caused by the high voltage/current input from the outside (for example, in case the pattern on the board is burnt), check if there is any problem in the customer's operation. If the customer's application is the capacitance measurement, check if the discharge is done correctly. Then advise the customer not to apply any external voltage/current to the UNKNOWN terminal.

In this kind of trouble, the repair should be charged to the customer.