

OPERATING AND SERVICE MANUAL

11678A LOW PASS FILTER KIT

11684A

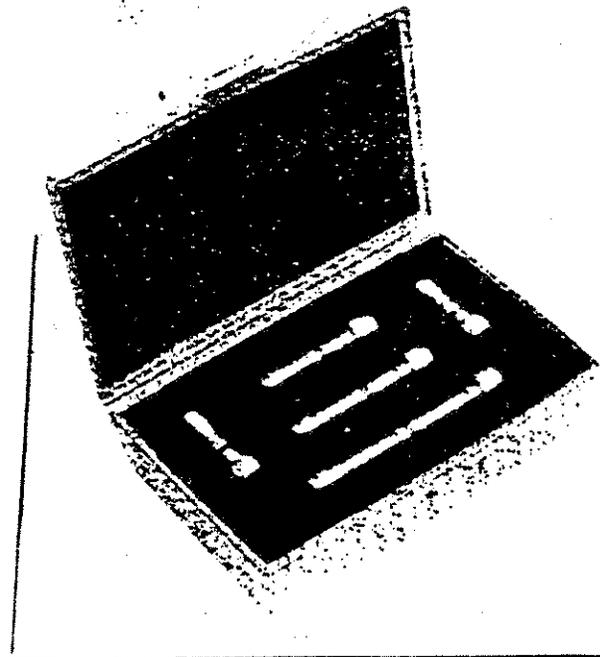
11685A

11686A

11688A

11689A

Low Pass Filters



NOVEMBER 1976



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CERTIFICATION

Hewlett-Packard Company certifies that this product met its published specifications at the time of shipment from the factory. Hewlett-Packard further certifies that its calibration measurements are traceable to the United States National Bureau of Standards, to the extent allowed by the Bureau's calibration facility, and to the calibration facilities of other International Standards Organization members.

WARRANTY

This Hewlett-Packard instrument product is warranted against defects in material and workmanship for a period of one year from date of shipment. During the warranty period, Hewlett-Packard Company will, at its option, either repair or replace products which prove to be defective.

For warranty service or repair, this product must be returned to a service facility designated by HP. Buyer shall prepay shipping charges to HP and HP shall pay shipping charges to return the product to Buyer. However, Buyer shall pay all shipping charges, duties, and taxes for products returned to HP from another country.

LIMITATION OF WARRANTY

The foregoing warranty shall not apply to defects resulting from improper or inadequate maintenance by Buyer, Buyer-supplied software or interfacing, unauthorized modification or misuse, operation outside of the environmental specifications for the product, or improper site preparation or maintenance.

NO OTHER WARRANTY IS EXPRESSED OR IMPLIED. HP SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

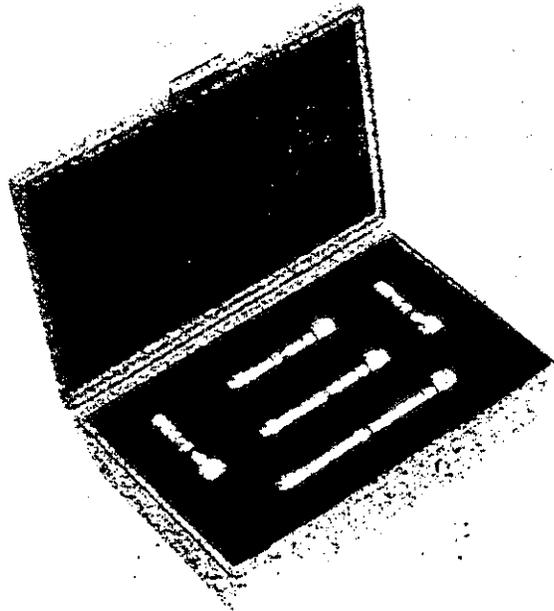
EXCLUSIVE REMEDIES

THE REMEDIES PROVIDED HEREIN ARE BUYER'S SOLE AND EXCLUSIVE REMEDIES. HP SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY.

ASSISTANCE

Product maintenance agreements and other customer assistance agreements are available for Hewlett-Packard products.

For any assistance, contact your nearest Hewlett-Packard Sales and Service Office. Addresses are provided at the back of this manual.

**DESCRIPTION:**

The HP 11678A Low Pass Filter Kit contains five low-pass filters, one each of the following: 11688A, 11689A, 11684A, 11685A, and 11686A. These filters are matched to the HP 8620 Series Sweep Oscillator frequency bands. The use of these filters is recommended to reduce undesirable harmonics generated by the power source when making precise broadband detector measurements.

SPECIFICATIONS:**Frequency Range: Cutoff Frequency (f_c):**

11688A:	2.8 GHz
11684A:	6.8 GHz
11689A:	4.4 GHz
11685A:	9.5 GHz
11686A:	13.0 GHz

Insertion Loss: Typically < 1.1 dB at .95 f_c

Rejection: Typically > 40 dB at 1.25 f_c

Impedance: 50 Ω Nominal

Connectors: Type N Male one end. Type N Female one end

Weight:

Net:	0.44 kg (1 lb)
Shipping:	1.2 kg (2.9 lb)

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To obtain servicing information and order replacement parts, contact the nearest Hewlett-Packard Sales and Service Office in HP Catalog, or contact the nearest regional office listed below.

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