

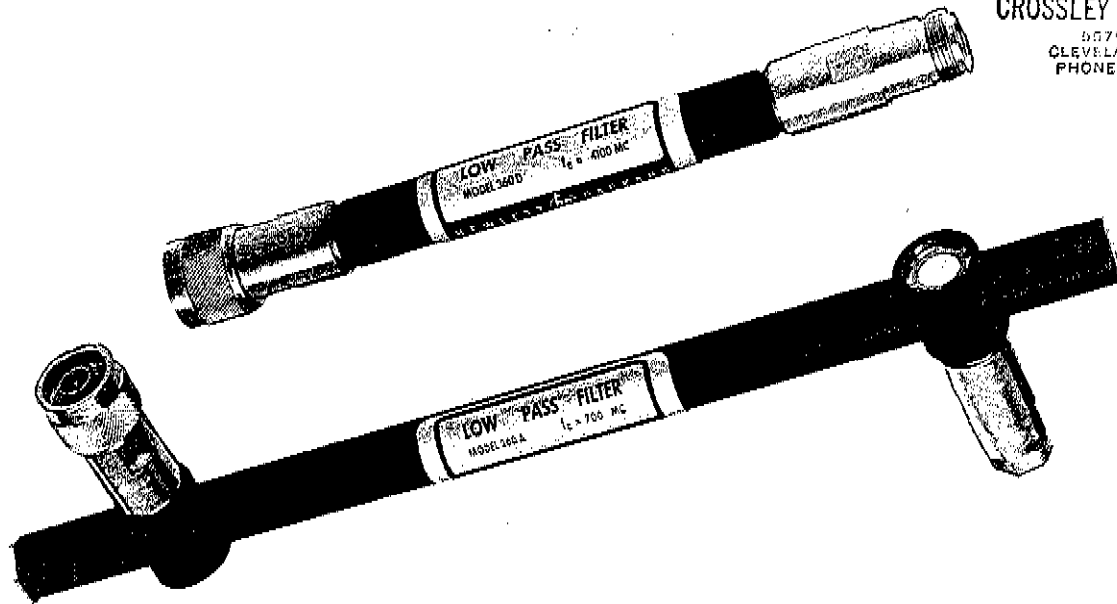
# TECHNICAL DATA



## 360A-D LOW PASS FILTER

Revised 10/15/64

HEWLETT-PACKARD  
CROSSLEY SALES DIVISION  
5070 PEARL ROAD  
CLEVELAND, OHIO 44129  
PHONE (216) 884-9209



### ADVANTAGES

- Low insertion loss through band pass
- Greater than 50 db attenuation beyond cut-off frequency
- No spurious responses

### USES

- Spectrum analyzer preselector

With signal generator or signal source in:

- Slotted line measurements
- Checking filter characteristics
- Determining response

### DESCRIPTION

The  $\text{\textcircled{C}}$  Model 360 Low Pass Filters are designed to facilitate microwave measurements by eliminating harmonics generated by the signal source. Elimination of harmonics is important in making slotted-line measurements, in checking filter characteristics, in determining receiver response and in many other applications. These filters can also be used as preselectors with the  $\text{\textcircled{C}}$  851A/8551A Spectrum Analyzer. As such they permit analysis of signals below the filter cutoff frequency without interference from higher-frequency signals.

### CIRCUIT

$\text{\textcircled{C}}$  360 filters consist of a brass tube housing a multi-section coaxial type filter. The ends are terminated in type N fittings, one male and one female. Attenuation in the pass band is less than 1 db; and attenuation in the rejection band is more than 50 db. There is no spurious response up to three times cut-off frequency.

COMPLETE COVERAGE IN  
ELECTRONIC MEASURING EQUIPMENT

HEWLETT-PACKARD COMPANY  
1501 PAGE MILL ROAD  
PALO ALTO, CALIFORNIA, U.S.A.  
CABLE: "NEWPACK" TEL. (415) 326-7000



54 ROUTE DES ACACIAS  
GENEVA, SWITZERLAND  
CABLE: "NEWPACKSA" TEL. (022) 42.81.50

**SPECIFICATIONS**

**CUT-OFF FREQUENCY:**

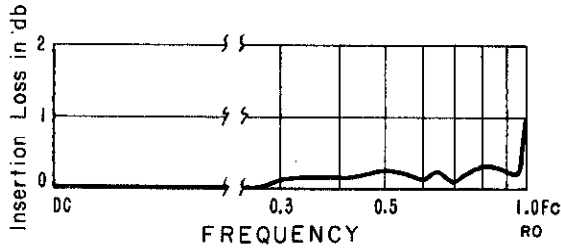
360A	700 Mc
360B	1200 Mc
360C	2200 Mc
360D	4100 Mc

**IMPEDANCE:**

50 ohms through pass band. Should be matched for optimum performance.

► **INSERTION LOSS:**

Not over 1 db below 0.9 times cut-off frequency



Typical Bandpass Characteristics

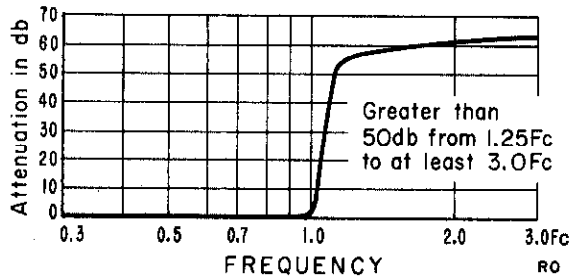
**STANDING WAVE RATIO:** Less than 1.6 to within 100 Mc of cut-off for 360A and 360B, 200 Mc of cut-off for 360C, 300 Mc of cut-off for 360D.

► **PHYSICAL CHARACTERISTICS**

Model	Overall Length		O.D.	
	(in.)	(mm)	(in.)	(mm)
360A	10-7/8	276	5/8	16
360B	7-7/32	183	5/8	16
360C	10-25/32	274	5/8	16
360D	7-3/8	187	5/8	16

**REJECTION:**

50 db or more attenuation at 1.25 x cut-off frequency



Typical Rejection Characteristics

Model	Distance from Center Line to End of Offset, Type N Connector			
	Male Offset		Female Offset	
	(in.)	(mm)	(in.)	(mm)
360A	2-1/8	54	2-1/4	57
360B	2-1/8	54	2-1/4	57

► **SHIPPING WEIGHT:**

Approximately 2 lbs. (0,9 kg)

**PRICE:**

- Ⓢ Model 360A Low Pass Filter, 700 Mc - \$70.00
- Ⓢ Model 360B Low Pass Filter, 1200 Mc - \$60.00
- Ⓢ Model 360C Low Pass Filter, 2200 Mc - \$50.00
- Ⓢ Model 360D Low Pass Filter, 4100 Mc - \$50.00

Prices f. o. b. factory

**DATA SUBJECT TO CHANGE WITHOUT NOTICE**

► Indicates change from prior specifications.

5/12/64

10/15/64