

ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
SENSOR

56006

Specialized - Sensor Tube electronic tube

Omegatron mass-spectrometer sensing tube with platinum electrodes and tungsten cathode. It analyzes residual gases by separating ions according to mass-to-charge ratio and measuring partial pressures.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B9G	BASE PINS	9
NOMINAL HEATER	– / –	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Sensor
No fixed ratings recorded. Omegatron mass-spectrometer tube. Published electrode voltages, RF drive, magnetic-field and pressure data are retained as parameters; no canonical promoted field mapping is reliable.

Omegatron mass-spectrometer tube with platinum electrodes and tungsten cathode for gas analysis. Published data were interpreted from the complete supplied Philips datasheet, including ratings, characteristics, operating conditions, and construction notes.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips 0-D

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1999 PHILIPS 0-D

Section 1 · Sensor

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Usable partial-pressure range	1e-11-1e-10 torr	—
Magnetic induction example	0.4 Wb/m2	—
RF frequency relation	$f = 15.33e6 * B / M$ Hz	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Recommended filament voltage range	0-2 V	—
RF voltage range	1-5 V RMS	—
Grid-to-box D voltage	-990 V	—
Electron collector voltage	-80 V	—
Box D voltage range	0-40 V	—
Ion collector voltage range	-10-10 mV	—
RF generator frequency range formula	$60e3*B$ to $16000e3*B$ Hz	—
Maximum recommended electrode cleaning temperature	800 degC	Pressure<1e-9torr

TUBE TINKER

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