

High-Mu Triode

CERAMIC-METAL PENCIL TYPE

FAST WARM-UP TIME

STURDY COAXIAL-ELECTRODE STRUCTURE

For Use as a Low-Noise-Amplifier Tube
in Receiver Applications up to 1500 Mc
under Severe Shock and Vibration

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC). $6.3 \pm 10\%$ volts

Current at heater volts = 6.3 0.225 amp

Cathode Warm-Up Time (Average) to

reach 80% of operating plate current

for dc plate-supply volts = 80,

dc grid volts = 0, cathode resistor

(ohms) = 0, load resistor (ohms) =

10, and heater volts = 6.3. 10 sec

Amplification Factor. 80

Transconductance for dc plate ma. = 13,

dc plate volts = 125, and cathode

resistor (ohms) = 50. 13500 μ hosDirect Interelectrode Capacitances:^aGrid to plate 2.4 μ fGrid to cathode and heater. 4.4 μ fPlate to cathode and heater 0.04 max. μ fHeater to cathode 2.6 μ fCathode to plate. 0.04 max. μ fCathode to grid and heater. 7.0 μ fPlate to grid and heater. 2.0 μ f

Mechanical:

Operating Position. Any

Dimensions. See *Dimensional Outline*

Weight (Approx.). 0.3 oz

Sockets:

Heater-terminals connector. Amerac^b No.1018-88^c,Grayhill^d No.22-5,

or equivalent

Socket for operation up to about

550 Mc (Including heater-

terminals connector). Jettron^e No.CD7010,

or equivalent

Cavities (Including heater-

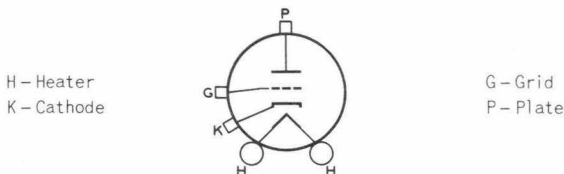
terminals connector). J-V-M^f No.D-7980 Series,Resdel^g No.10 Series,

or equivalent

← Indicates a change.



Terminal Connections (See *Dimensional Outline*):



RADIO-FREQUENCY AMPLIFIER — Class A₁

Maximum CCS^h Ratings, Absolute-Maximum Values:

*For altitudes up to 100,000 feet
and frequencies up to 1500 Mc*

DC PLATE VOLTAGE.	250 max.	volts
DC GRID VOLTAGE.	-50 max.	volts
DC PLATE CURRENT.	25 max.	ma
PLATE DISSIPATION.	2.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	50 max.	volts
Heater positive with respect to cathode.	50 max.	volts
PLATE-SEAL TEMPERATURE.	225 max.	°C

Typical CCS^h Operation in Cathode-Drive Circuit:

	At 550 Mc	At 800 Mc	At 1100 Mc	
DC Plate-to-Grid Voltage.	125	125	150	volts
Cathode Resistor.	50	50	50	ohms
Input-Signal-Level Range.	-70 to -20	-70 to -20	-70 to -20	dbm
DC Plate Current.	13	13	13.5	ma
Power Gain.	16.5	18	16	db
Bandwidth.	5	5	10	Mc
Noise Figure.	6.5	8.5	12.5	db

Maximum Circuit Values:

Grid-Circuit Resistance:

For fixed-bias operation. Not recommended
For cathode-bias operation. 0.25 max. megohm

^a Without external shield.

^b Amerac, Inc., Dunham Road, Beverly, Massachusetts.

^c For use with cavities.

^d Grayhill, Inc., 561 Hillgrove Avenue, LaGrange, Illinois.

^e Jettron Products, Inc., 56 Route 10, Hanover, N.J.

^f J-V-M Microwave Co., 9300 W. 47th St., Brookfield, Illinois. Indicated No. applies to a series of cavities covering range from 220 up to 1000 Mc and above.

^g Resdel Engineering Corp., 330 South Fair Oaks Avenue, Pasadena, California. This series of cavities covers the range from 215 to 2325 Mc.

^h Continuous Commercial Service.

→ Indicates a change.