



ELECTRONIC TUBE REFERENCE

Z5317

Power - Triode Single (under 10W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

High-mu metal-ceramic planar triode for continuous-wave RF power-amplifier and frequency-multiplier service. High transconductance and compact planar geometry provide useful high-frequency power from modest dissipation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 750 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.0135 S
AMPLIFICATION FACTOR	35
MAXIMUM PLATE VOLTAGE	350 V
MAXIMUM PLATE DISSIPATION	8 W
MAXIMUM CATHODE CURRENT	35 mA
<i>Promoted fields mapped semantically from printed ratings/characteristics headings; pulsed and microwave-specific limits remain in parameter rows when fixed-field semantics are ambiguous.</i>	

High-mu metal-and-ceramic planar triode for CW RF power-amplifier or frequency-multiplier service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current	750 mA	Heater Current 0.75 Amperes
Plate Voltage --- --	350 V	Plate Voltage --- ---- 350 Volts
DC Grid Bias, approximate -1.5 -3.5	-5.25 V	DC Grid Bias, approximate -1.5 -3.5 -5.25 Volts
Transconductance 13500 16500	19000 uS	Transconductance 13500 16500 19000 Micromhos
Plate Current --- --	35 mA	Plate Current --- ---- 35 Milliamperes
Frequency	1000 MHz	Frequency 1000 Megacycles
DC Plate Voltage	350 V	DC Plate Voltage 350 Volts
DC Plate Current	35 mA	DC Plate Current 35 Milliamperes
DC Grid Current	8 mA	DC Grid Current 8.0 Milliamperes
Useful Power Output	5 W	Useful Power Output 5.0 Watts
CATH00E	0 C	CATH00E 0 C sqmu {

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate 2.10 2.3	2.45 pf	Grid to Plate 2.10 2.3 2.45 pf
Grid to Cathode, Eh = 0 4.60 5.1	5.45 pf	Grid to Cathode, Eh = 0 4.60 5.1 5.45 pf
Plate to Cathode, Eh = 0 --- 0.035	0.045 pf	Plate to Cathode, Eh = 0 --- 0.035 0.045 pf
Envelope Temperature	175 C	Envelope Temperature 175 C
Frequency	1000 MHz	Frequency 1000 Megacycles
DC Plate Voltage	350 V	DC Plate Voltage 350 Volts
Negative DC Grid Voltage	50 V	Negative DC Grid Voltage 50 Volts

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC Plate Current	35 mA	DC Plate Current 35 Milliamperes
DC Grid Current	15 mA	DC Grid Current 15 Milliamperes
Plate Dissipation	8 W	Plate Dissipation 8.0 Watts
Heater Positive with Respect to Cathode	90 V	Heater Positive with Respect to Cathode 90 Volts
Heater Negative with Respect to Cathode	90 V	Heater Negative with Respect to Cathode 90 Volts
Envelope Temperature at Hottest Point	175 c	Envelope Temperature at Hottest Point 175 c