

ELECTRONIC TUBE REFERENCE

ZP1034

Power - Tetrode (NOT beam) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TETRODE

High-power L-band tetrode for pulsed RF operation in ground-based radar and pulse-transmitter equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6 V / 5.5 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
MAXIMUM PLATE VOLTAGE	4000 V
MAXIMUM PLATE DISSIPATION	750 W
Promoted fields mapped semantically from printed ratings/characteristics headings; pulsed and microwave-specific limits remain in parameter rows when fixed-field semantics are ambiguous.	

High-power L-band tetrode for pulsed RF service in ground-based equipment.



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 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
The tube is capable of providing useful output at frequencies up to approximately	1500 MHz	The tube is capable of providing useful output at frequencies up to approximately 1500 megacycles.
Heater Voltage t 6.0 6.3	6.8 V	Heater Voltage t 6.0 6.3 6.8 Volts
Egz =	2175 V	Egz = 2175 Volts DC, E, = 1000 Volts DC,
}, =	200 mA	}, = 200 Milliamperes DC
Pulsed Drive,	1300 MHz	Pulsed Drive, 1300 Megacycles
DCPlateVoltage i i it ee e teannnan c e es e e e	4 kV	DCPlateVoltage i i it ee e teannnan c e es e e e ... 4 Kilovolts
DC Plate Current, during pulse c et c e e sttt et e,	6 A	DC Plate Current, during pulse c et c e e sttt et e, 6 Amperes
DCGrid-No. 2 Voltage v i it v vttt teeotoneeseonsanoeeesocnsens	1.1 kV	DCGrid-No. 2 Voltage . . . v i it v vttt teeotoneeseonsanoeeesocnsens 1.1 Kilovolts
DC Grid-No. 1 Voltage e e et ereecrersesses =	220 V	DC Grid-No. 1 Voltage e e et ereecrersesses =220 Volts
DC Grid-No. 1 Current ttt ttoeeeeeersascaosnnesas «e+	1.5 A	DC Grid-No. 1 Current ttt ttoeeeeeersascaosnnesas «e+..1.5 Amperes
Plate Dissipation# 00t ittt et ntveeesneens ct et e	750 W	Plate Dissipation# 00t ittt et ntveeesneens ct et e . 750 Watts
Pulse Width ** \$f i it et i ettt nnenns C et et e .+,	15 us	Pulse Width ** \$f i it et i ettt nnenns C et et e .+, 15 Microseconds

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grounded -grid Circuit at	1300 MHz	Grounded -grid Circuit at 1300 Megacycles, V4 Output Circuit
DC Plate Voltage## c et e et e e e e ettt	4 kV	DC Plate Voltage## c et e et e e e e ettt 4.0 Kilovolts
DC Plate Current duringpulse it it ittt ittt ittt tn s s	3.5 A	DC Plate Current duringpulse it it ittt ittt ittt tn s s 3.5 Amperes
DCGrid-No. 2Voltage .. . v v v i vttt vt teneetonoensonoess e e	750 V	DCGrid-No. 2Voltage .. . v v v i vttt vt teneetonoensonoess e e 750 Volts
DC Grid-No. 2 Current, during pulse φ .ttt teeecoencens	75 mA	DC Grid-No. 2 Current, during pulse φ .ttt teeecoencens . 75 Milliamperes
DC Grid-No. 1 Voltage .. . c.vvvt v iet tennnronnsenssoeens	-150 V	DC Grid-No. 1 Voltage .. . c.vvvt v iet tennnronnsenssoeens-150 Volts
DC Grid-No. 1 Current, duringpulse φttt et toenncens	150 mA	DC Grid-No. 1 Current, duringpulse φttt et toenncens 150 Milliamperes
Driving Power at Tube, duringpulse o vt it ittt v i v e oo nn oo	750 W	Driving Power at Tube, duringpulse o vt it ittt v i v e oo nn oo 750 Watts
Power Output, during pulse (useful) it vvteroneeneennan	7.5 kW	Power Output, during pulse (useful) it vvteroneeneennan 7.5 Kilowatts
Pulse Width 1 et e e	15 us	Pulse Width 1 et e e 15 Microseconds
##A minimum surge-limiting resistance of	50 Ohm	##A minimum surge-limiting resistance of 50ohms mustbe placed between the plateof the tube and the B+ power
supply at steady-state voltages greater than	3.5 kV	supply at steady-state voltages greater than 3.5 kilovolts.
Diameter A	0.016 in	Diameter A - 0,016 inches
Diameter B	0.036 in	Diameter B - 0,036 inches
Diameter C ~	0.042 in	Diameter C ~ 0,042 inches
ment terminal diameter (B)	0.016 in	ment terminal diameter (B) - 0,016 inches,