

ELECTRONIC TUBE REFERENCE

6299

Voltage - Triode (single high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

High-mu metal-ceramic planar triode for grounded-grid Class-A UHF amplifier applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	7300 Ω
TRANSCONDUCTANCE	0.015 S
AMPLIFICATION FACTOR	110
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	2 W

The 6299 is a high-mu metal-and-ceramic planar triode intended as a grounded-grid Class A RF amplifier at frequencies as high as 3000 MHz. Its small planar construction and low capacitances suit coaxial circuits and low-noise UHF/microwave receiver 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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Noise Figure	8.5 dB	1200MHz; grounded-grid coaxial circuit
Maximum Frequency	3000 MHz	ClassA grounded-grid amplifier
The	6299 C	FOR GROUNDED-GRID CLASS A
Envelope Temperature at Hottest Poimnt L1	150 C	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid Voltaged + + + o	4 V	—
PlateVoltage approximate Ib	10 mA	—
Plate Voltage e e e e e e e e e -- Fk	175 V	CLASS A, RF AMPLIFIER-GROUNDEDGRID, COAXIAL-TYPE CIRCUIT
Plate-Supply Voltage## T	300 V	CLASS A, RF AMPLIFIER-GROUNDEDGRID, COAXIAL-TYPE CIRCUIT
# The	6299 C	# The 6299 is rated only for Class A amplifier service.
Adjusted for Ib	10 mA	# The 6299 is rated only for Class A amplifier service.
Adjust for Ib	10 mA	# The 6299 is rated only for Class A amplifier service.
For operation above	1000 MHz	# The 6299 is rated only for Class A amplifier service.
at zero bias For operation below	1000 MHz	# The 6299 is rated only for Class A amplifier service.
il Adjusted for Ib	10 mA	# The 6299 is rated only for Class A amplifier service.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ef	6.3 V	# The 6299 is rated only for Class A amplifier service.
Grid to Plate at	500 V	# The 6299 is rated only for Class A amplifier service.
Noise Figure	450 C	# The 6299 is rated only for Class A amplifier service.
Noise Figure	1200 C	# The 6299 is rated only for Class A amplifier service.
Noise Figure	3000 C	# The 6299 is rated only for Class A amplifier service.
Power Gain	450 C	# The 6299 is rated only for Class A amplifier service.
Bandwidth	9 C	# The 6299 is rated only for Class A amplifier service.
Power Gain	1200 C	# The 6299 is rated only for Class A amplifier service.
Bandwidth	10 C	# The 6299 is rated only for Class A amplifier service.
Power Gain	3000 C	# The 6299 is rated only for Class A amplifier service.