



ELECTRONIC TUBE REFERENCE

4028A

Power - Triode Single (under 10W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

High-mu ceramic-metal pencil triode for pulsed RF amplification, oscillation, and frequency multiplication into the multi-gigahertz region. High transconductance and compact low-inductance construction provide strong gain in microwave-frequency pulse circuits.

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

SECTION 1 Triode	
TRANSCONDUCTANCE	0.0225 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	8 W
MAXIMUM GRID DISSIPATION	3 W
MAXIMUM CATHODE CURRENT	35 mA
High-mu ceramic-metal pencil triode. Plate resistance derived from published μ/gm at the published characteristic point.	

High-mu ceramic-metal pencil triode for pulse, oscillator, amplifier, and frequency-multiplier service to several GHz.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

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Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	6.3 V	—
Heater/filament current	300 mA	—
Maximum plate voltage	300 V	—
Maximum plate dissipation	8 W	—
Typical pulsed plate voltage	2000 V	PulseRF
Useful power output	1000 W	PulseRF
Peak heater-cathode voltage	60 V	BothPolarities
RF amplifier useful power output	6 W	CW

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	70	—
Transconductance	22500 μ S	—
Plate resistance	3111.111 ohm	DerivedFromPublishedMuAndGm