



ELECTRONIC TUBE REFERENCE

2C42

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

General Electric 2C42 indirectly heated disk-seal UHF pulsed power oscillator triode rated for operation to 1.3 GHz, with 6.3 V 0.9 A heater and 3 kV peak anode rating.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	6
NOMINAL HEATER	6.3 V / 900 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.008 S
AMPLIFICATION FACTOR	48
MAXIMUM PLATE VOLTAGE	3000 V
MAXIMUM PLATE DISSIPATION	25 W
MAXIMUM CATHODE CURRENT	4 A
GE 2C42 RMA 1946 disk-seal UHF plate-pulsed oscillator triode. Mu 48; gm 0.008 A/V at plate current 22 mA. Maximum plate voltage 3000 V is PEAK PULSE only, not continuous DC. LOW duty max: peak anode 3000 V, cathode peak 4 A, pulse width 3 μs, dissipation 12 W, frequency 1300 MHz. HIGH duty max: peak anode 2000 V, cathode peak 1.5 A, pulse width 9 μs, dissipation 25 W, frequency 1300 MHz. Promoted max_plate_dissipation 25 W is conditional high-duty rating, not valid at 3000 V low-duty regime. Typical low-duty 3000 V, 2 mA avg plate, 2.5 A peak cathode, 1 μs at 1000 Hz, 4.25 W plate dissipation, ~1750 W peak RF at 1050 MHz; high-duty 2000 V, 7.2 mA avg plate, 1.5 A peak cathode, 3 μs at 2000 Hz, 9.9 W plate dissipation, ~750 W peak RF at 1050 MHz. Max seal 200°C. Capacitances Cgp 1.7 pF, Cgk 2.9 pF, Cpk max 0.05 pF, cathode RF contact 100 pF. Do not assign pulse peak cathode current to DC max_cathode_current field.	

Disk-seal triode designed for stable plate-pulsed oscillator operation through 1300 MHz.



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
HeaterOrFilamentVoltageNominal	6.3 V	—
HeaterOrFilamentCurrentNominal	900 mA	—
MaxPlateVoltage	3000 V	—
MaxCathodeCurrent	4 A	—