



ELECTRONIC TUBE REFERENCE

34E

Voltage - Pentode Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Directly heated battery RF pentode designed for radio-frequency amplification in portable receiving equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	2 V / 60 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	600000 Ω
TRANSCONDUCTANCE	0.0006 S
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM SCREEN VOLTAGE	67.5 V
<i>Brimar 1948 identifies 34E as a directly heated battery vari-mu (remote-cutoff) RF pentode with 2.0 V, 0.06 A filament. At V_a 67.5 V, V_{g2} 67.5 V, V_{g1} -3 V: I_a 2.7 mA, I_{g2} 1.1 mA, r_p approximately 400 kΩ and g_m 0.56 mA/V. At V_a 135 V, V_{g2} 67.5 V, V_{g1} -3 V: I_a 2.8 mA, I_{g2} 1.0 mA, r_p approximately 600 kΩ and g_m 0.60 mA/V; the latter operating point supplies promoted g_m and r_p. Control-grid bias -22.5 V reduces g_m to 0.015 mA/V, demonstrating variable-mu action. Brimar labels base U.X., while current parent indicates 7-pin IO; preserve existing base fields pending independent confirmation. Brimar table provides operating characteristics, not explicitly absolute voltage maximums, so existing voltage limits retained.</i>	

Directly heated RF pentode.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1948 Brimar Radio Valve Manual

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

1948 BRIMAR RADIO VALVE MANUAL

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	2 V	—
HeaterOrFilamentCurrent	60 mA	—

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