



ELECTRONIC TUBE REFERENCE

XCC189

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Variable-transconductance twin triode designed for television channel-selector and cascode applications, providing controlled RF gain in television tuner front ends.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	4.5 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	2500 Ω
TRANSCONDUCTANCE	0.0125 S
AMPLIFICATION FACTOR	34
MAXIMUM PLATE VOLTAGE	130 V
MAXIMUM PLATE DISSIPATION	1.8 W
MAXIMUM CATHODE CURRENT	22 mA
<p>Miniwatt XCC189/4ES8 variable-transconductance twin triode for TV tuner/cascode service. First physical triode, intended grounded-cathode input stage. Typical characteristic point approximately V_a 90 V, I_a 15–16 mA, g_m 12.5 mA/V, amplification factor 34, plate resistance approximately 2.5 kΩ. Transconductance falls markedly as negative grid bias increases. Maximum operating plate 130 V, dissipation 1.8 W and cathode current 22 mA per section; 550 V is zero-current plate-supply limit, not working anode limit. Heater source discrepancy: Miniwatt 4.5 V 0.6 A; RCA 4ES8/XCC189 lists 4.0 V 0.6 A. Parent 4.5 V retained pending reconciliation.</p>	

SECTION2 Triode	
PLATE RESISTANCE	2500 Ω
TRANSCONDUCTANCE	0.0125 S
AMPLIFICATION FACTOR	34
MAXIMUM PLATE VOLTAGE	130 V
MAXIMUM PLATE DISSIPATION	1.8 W
MAXIMUM CATHODE CURRENT	22 mA
<p><i>Miniwatt XCC189/4ES8 variable-mu TV cascode dual triode, second physical section for grounded-grid stage. At typical V_a 90 V and I_a roughly 15–16 mA, g_m 12.5 mA/V, μ 34, plate resistance approximately 2.5 kΩ; the variable-gain characteristic changes with grid bias. Per-section maxima plate 130 V, dissipation 1.8 W and cathode current 22 mA. Heater source conflict: Miniwatt 4.5 V 0.6 A versus RCA 4.0 V 0.6 A; nominal parent heater retained at 4.5 V pending explicit resolution.</i></p>	

Variable-transconductance twin triode for television channel-selector and cascode applications.

TUBE TINKER

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