



ELECTRONIC TUBE REFERENCE

ECF803

Voltage Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

ECF803 indirectly heated triode-pentode for mixer, oscillator and amplifier service in television and VHF receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 380 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.009 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	20 mA
ECF803 triode, source page 419: switch-on anode max 550 V; typical V_a 100 V, I_a 15 mA, g_m 9 mA/V, μ 20. Capacitances input 3.3 pF, output 1.7 pF, transfer 1.8 pF. Max grid circuit resistance 500 k Ω .	

SECTION2 Pentode

PLATE RESISTANCE	350000 Ω
TRANSCONDUCTANCE	0.011 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	18 mA

ECF803 pentode, source page 419: switch-on anode/screen maximum 550 V. Typical V_a 170 V, V_{g2} 120 V, I_a 10 mA, I_{g2} 3 mA, g_m 11 mA/V, r_p 350 k Ω . Screen dissipation max 0.3 W for $-V_{g1} \geq 2$ V; 0.4 W for $1.5 < -V_{g1} < 2$ V; 0.45 W for $-V_{g1} \leq 1.5$ V. Input 6.2 pF, output 3.7 pF, transfer < 0.009 pF. Grid1 circuit resistance max 2.2 M Ω .

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1981 Russian Tubes Katsnelson and Larionov

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

1981 RUSSIAN TUBES KATSNELSON AND LARIONOV

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	ECF803 specific values, Katsnelson and Larionov 1981, p.419
Plate current	15 mA	ECF803 specific values, Katsnelson and Larionov 1981, p.419

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	9000 μ S	ECF803 specific values, Katsnelson and Larionov 1981, p.419

1981 RUSSIAN TUBES KATSNELSON AND LARIONOV

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	170 V	ECF803 specific values, Katsnelson and Larionov 1981, p.419
Screen voltage	120 V	ECF803 specific values, Katsnelson and Larionov 1981, p.419
Plate current	10 mA	ECF803 specific values, Katsnelson and Larionov 1981, p.419
Screen current	3 mA	ECF803 specific values, Katsnelson and Larionov 1981, p.419

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	11000 μ S	ECF803 specific values, Katsnelson and Larionov 1981, p.419

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	350000 Ω	ECF803 specific values, Katsnelson and Larionov 1981, p.419