

# ELECTRO-HARMONIX EF86EH

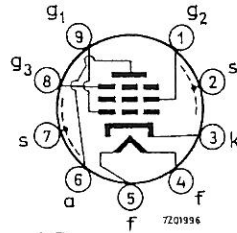
## AUDIO SMALL SIGNAL PENTODE

**HEATING:** Indirect by A.C. or D.C.; series or parallel supply

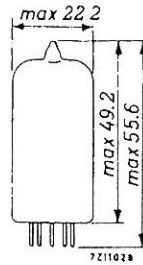
Heater voltage	$V_f$ 6.3 V
Heater current	$I_f$ 200 mA

### DIMENSIONS AND CONNECTIONS

Base: Noval



Dimensions in mm



### CAPACITANCES

Grid No.1 to all except anode	$C_{g1(a)}$ 3.8 pF
Anode to all except grid No.1	$C_{a(g1)}$ 5.1 pF
Anode to grid No.1	$C_{ag1}$ max. 0.05 pF
Grid No.1 to heater	$C_{g1f}$ max. 0.0025 pF

### TYPICAL CHARACTERISTICS

Anode voltage	$V_a$ 250 V
Grid No.3 voltage	$V_{g3}$ 0 V
Grid No.2 voltage	$V_{g2}$ 140 V
Grid No.1 voltage	$V_{g1}$ -2.2 V
Anode current	$I_a$ 3.0 mA
Grid No.2 current	$I_{g2}$ 0.6 mA
Transconductance	$S$ 2.2 mA/V
Amplification factor	$\mu_{g2g1}$ 38 -
Internal resistance	$R_i$ 2.5 M $\Omega$

### LIMITING VALUES (Design centre rating system)

Anode voltage	$V_{a0}$ max. 550 V
	$V_a$ max. 300 V
Anode dissipation	$W_a$ max. 1.0 W
Grid No.2 voltage	$V_{g20}$ max. 550 V
	$V_{g2}$ max. 200 V
Grid No.2 dissipation	$W_{g2}$ max. 0.2 W
Grid No.1 circuit resistor	
if $W_a < 0.2$ W	$R_{g1}$ max. 10 M $\Omega$
if $W_a > 0.2$ W	$R_{g1}$ max. 3 M $\Omega$
with grid current biasing	$R_{g1}$ max. 22 M $\Omega$
Cathode current	$I_k$ max. 6 mA
Cathode to heater voltage	
cathode positive	$V_{kf}$ max. 100 V
cathode negative	$V_{kf}$ max. 50 V