

ELECTRONIC TUBE REFERENCE

7722

Voltage - Pentode electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PENTODE

Wideband pentode amplifier with very high transconductance, co-designated E280F. Its manufacturer-defined role is broadband signal amplification where high gain and wide frequency response are required.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9EQ	BASE PINS	9
NOMINAL HEATER	6.3 V / 320 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9EQ - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	K – Cathode	CONNECTED
PIN2	–	G1 – Control Grid	CONNECTED
PIN3	–	K – Cathode	CONNECTED
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN6	–	–	IC
PIN7	–	P – Plate (Anode)	CONNECTED
PIN8	–	G3 – Suppressor Grid	CONNECTED
PIN8	–	IS – Internal Screen	CONNECTED
PIN9	–	G2 – Screen Grid	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	100000 Ω
TRANSCONDUCTANCE	0.026 S
MAXIMUM PLATE VOLTAGE	220 V
MAXIMUM SCREEN VOLTAGE	180 V
MAXIMUM PLATE DISSIPATION	4 W
MAXIMUM SCREEN DISSIPATION	1.1 W
MAXIMUM CATHODE CURRENT	30 mA
WARM-UP TIME	120 s
<i>Pentode-mode values promoted; triode-connected characteristics retained as parameters.</i>	

Wideband pentode amplifier with very high transconductance. Co-designated E280F.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 CBS Hytron

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

1960 CBS HYTRON

Section 1 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	9.3 pF	—
Output capacitance	2.1 pF	—
Grid-to-plate capacitance	0.035 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	190 V	PentodeConnection

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	20 mA	PentodeConnection
Screen-grid current	6 mA	PentodeConnection
Transconductance	26000 uS	PentodeConnection
Plate resistance	100 kOhm	PentodeConnection
Plate current	24.5 mA	TriodeConnection
Transconductance	33000 uS	TriodeConnection
Plate resistance	1800 Ohm	TriodeConnection
Amplification factor	60 ratio	TriodeConnection

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