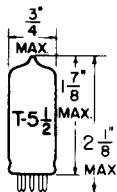


TUNG-SOL

**PENTODE
MINIATURE TYPE**



GLASS BULB

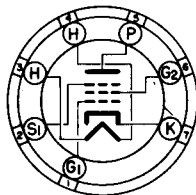
COATED UNIPOTENTIAL CATHODE

HEATER

12.6 VOLTS 0.190 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON
7 PIN BASE

78K

THE 12EA6 IS A PENTODE IN THE 7-PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR USE AS AN RF AMPLIFIER IN AUTOMOBILE RADIO RECEIVERS AND IS DESIGNED TO OPERATE WITH ITS PLATE AND SCREEN VOLTAGES SUPPLIED DIRECTLY FROM A 12 VOLT STORAGE BATTERY.

**DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD**

GRID #1 TO PLATE (MAX.)	0.04	$\mu\mu\text{f}$
INPUT	11	$\mu\mu\text{f}$
OUTPUT	4.0	$\mu\mu\text{f}$

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	12.6 ^A	VOLTS
MAXIMUM PLATE VOLTAGE	16	VOLTS
MAXIMUM SCREEN VOLTAGE	16	VOLTS
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	0	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE		
HEATER POSITIVE WITH RESPECT TO CATHODE	16	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE	16	VOLTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE	10	MEGOHMS
MAXIMUM GRID #3 CIRCUIT RESISTANCE *	10	MEGOHMS

^A WHEN USED IN AUTOMOTIVE SERVICE FROM A 12-VOLT SOURCE, UNDER NO CIRCUMSTANCES SHOULD THE HEATER VOLTAGE BE LESS THAN 10.0 VOLTS OR MORE THAN 15.9 VOLTS. THESE EXTREME VARIATIONS IN HEATER VOLTAGE MAY BE TOLERATED FOR SHORT PERIODS; HOWEVER, OPERATION AT OR NEAR THESE ABSOLUTE LIMITS IN HEATER VOLTAGE NECESSARILY INVOLVES SACRIFICE IN PERFORMANCE AT LOW HEATER VOLTAGE AND IN LIFE EXPECTANCY AT HIGH HEATER VOLTAGE. EQUIPMENT RELIABILITY CAN BE SIGNIFICANTLY INCREASED WITH IMPROVED SUPPLY-VOLTAGE REGULATION.

DESIGN-MAXIMUM RATINGS ARE THE LIMITING VALUES EXPRESSED WITH RESPECT TO BOGIE TUBES AT WHICH SATISFACTORY TUBE LIFE CAN BE EXPECTED TO OCCUR. TO OBTAIN SATISFACTORY CIRCUIT PERFORMANCE, THEREFORE, THE EQUIPMENT DESIGNER MUST ESTABLISH THE CIRCUIT DESIGN SO THAT NO DESIGN-MAXIMUM VALUE IS EXCEEDED WITH A BOGIE TUBE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, AND ENVIRONMENTAL CONDITIONS.

CONTINUED ON FOLLOWING PAGE

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TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER

HEATER VOLTAGE	12.6	VOLTS
HEATER CURRENT	0.190 ←	AMP.
PLATE VOLTAGE	12.6	VOLTS
SUPPRESSOR VOLTAGE	0	VOLTS
SCREEN VOLTAGE	12.6	VOLTS
GRID #1 RESISTOR (BYPASSED)	10	MEG OHMS
PLATE RESISTANCE (APPROX.)	32 000	OHMS
TRANSCONDUCTANCE	3 800	μMHOS
PLATE CURRENT	3.2	MA.
SCREEN CURRENT	1.4	MA.
GRID #1 VOLTAGE (APPROX.)		
$I_b = 10 \mu\text{AMP.}$	-3.4	VOLTS
		MEG OHMS

→ INDICATES A CHANGE.