

**TUNG-SOL**

**TWIN TRIODE**

MINIATURE TYPE

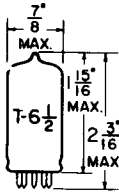
COATED UNIPOTENTIAL CATHODE

HEATER

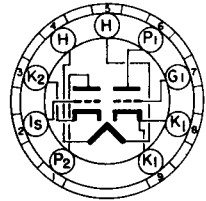
6.3 VOLTS 0.4 AMP.

AC OR DC

ANY MOUNTING POSITION



GLASS BULB



**BOTTOM VIEW**

SMALL BUTTON  
9 PIN BASE

9FC ←

BECAUSE OF THE CONNECTION OF THE INTERNAL SHIELD, SECTION 1 (PINS 6, 7, 8, AND 9) MUST BE USED AS THE INPUT OR GROUNDED-CATHODE SECTION.

THE 6CH7 IS A MEDIUM MU TWIN TRIODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR USE AS A CASCODE RF AMPLIFIER IN VHF TELEVISION TUNERS. THE ELECTRICAL CHARACTERISTICS OF THE TUBE ARE ESSENTIALLY EQUIVALENT TO THOSE OF THE 6BZ7 FROM WHICH IT DIFFERS PRIMARILY IN BASING. BECAUSE OF THE REVISED BASING, THE 6CH7 EXHIBITS AN IMPROVED NOISE FIGURE IN CASCODE SERVICE.

**DIRECT INTERELECTRODE CAPACITANCES**

WITH EXTERNAL SHIELD #315 CONNECTED TO HEATER UNLESS OTHERWISE SPECIFIED

	SECTION #1	SECTION #2	
GRID TO PLATE	1.1	---	μuf
INPUT	2.4	---	μuf
OUTPUT	0.8	---	μuf
HEATER TO CATHODE	2.8 <sup>A</sup>	2.8 <sup>A</sup>	μuf
GRID TO GRID (MAX.)		0.15	μuf
PLATE TO PLATE (MAX.)		0.015	μuf
PLATE TO CATHODE (MAX.)	0.15	0.15	μuf
GROUNDED-GRID INPUT	---	5.5	μuf
GROUNDED-GRID OUTPUT	---	2.2	μuf

**RATINGS**

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

EACH SECTION

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM PLATE VOLTAGE	250 <sup>B</sup>	VOLTS
MAXIMUM NEGATIVE DC GRID VOLTAGE	50	VOLTS
MAXIMUM PLATE DISSIPATION	2.0	WATTS
MAXIMUM DC CATHODE CURRENT	20	MA.
MAXIMUM HEATER-CATHODE VOLTAGE		
HEATER POSITIVE WITH RESPECT TO CATHODE DC COMPONENT	100	VOLTS
TOTAL DC AND PEAK	200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE TOTAL DC AND PEAK	200 <sup>B</sup>	VOLTS
MAXIMUM GRID CIRCUIT RESISTANCE	0.5	MEG OHMS

<sup>A</sup> WITH EXTERNAL SHIELD #315 CONNECTED TO GROUND.

<sup>B</sup> THIS RATING MAY BE AS HIGH AS 300 VOLTS MAXIMUM UNDER CUTOFF CONDITIONS WHEN THE TUBE IS USED AS A CASCODE AMPLIFIER AND THE TWO SECTIONS ARE CONNECTED IN SERIES.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

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CONTINUED FROM PRECEDING PAGE

**TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS**CLASS  $A_1$  AMPLIFIER - EACH SECTION

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.4	AMP.
PLATE VOLTAGE	150	VOLTS
CATHODE-BIAS RESISTOR	220	OHMS
AMPLIFICATION FACTOR	36	
PLATE RESISTANCE (APPROXIMATE)	5 300	OHMS
TRANSCONDUCTANCE	6 800	$\mu$ MHOS
PLATE CURRENT	10	MA.
GRID VOLTAGE (APPROXIMATE) $I_b=100 \mu$ AMP.	-7	VOLTS

*SIMILAR TYPE REFERENCE: 6BZ7*