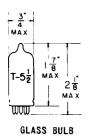
# - TUNG·SOL -

## TRIODE MINIATURE TYPE



COATED UNIPOTENTIAL CATHODE HEATER

2.35 VOLTS 0.60±6% AMP.

ANY MOUNTING POSITION



BOTTOM VIEW
SMALL BUTTON MINIATURE
7 PIN BASE

7 F P

THE 2ES5 IS A TRIODE TUNER IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE IN GROUNDED CATHODE RF AMPLIFIERS. EXCEPT FOR HEATER RATINGS AND HEATER WARM-UP TIME, THE 2ES5 IS IDENTICAL TO THE 3ES5 AND THE 6ES5.

### DIRECT INTERELECTRODE CAPACITANCES

	SHIELD <sup>A</sup>	SHIELD	
GRID TO PLATE: G TO P (MAX.)	0.5	0.5	μμ f
INPUT: G TO (H+K+1.S.)	3.2	3.2	μμ f
OUTPUT: P TO(H+K+1.S.)	4.0	3.2	$\mu\mu$ f

Awith external shield #316 connected to Pin 1.

#### RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM B

HEATER VOLTAGE	2.35	VOLTS
MAXIMUM PLATE VOLTAGE	250	VOLTS
MAXIMUM POSITIVE GRID VOLTAGE	0	VOLTS
MAXIMUM PLATE DISSIPATION	2.2	WATTS
MAXIMUM DC CATHODE CURRENT	22	MA.
MAXIMUM GRID CIRCUIT RESISTANCE	1.0	MEGOHM
MAXIMUM HEATER—CATHODE VOLTAGE: (TOTAL DC AND PEAK)		
HEATER NEGATIVE WITH RESPECT TO CATHODE	100	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	100	VOLTS
HEATER WARM-UP TIME (APPROX.) *	11.0	SECONDS

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# TUNG-SOL -

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A1 AMPLIFIER

HEATER VOLTAGE	2.35	VOLTS
HEATER CURRENT	0.60±6%	AMP.
PLATE VOLTAGE	200	VOLTS
GRID VOLTAGE	-1.0	VOLT
PLATE RESISTANCE (APPROX.)	8000	OHMS
TRANSCONDUCTANCE	9000	<b>μM</b> H0S
AMPLIFICATION FACTOR	75	
PLATE CURRENT	10	MA.
GRID VOLTAGE (APPROX.) FOR 100 $\mu$ A PLATE CURRENT	-6.0	VOLTS

<sup>\*</sup>HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

B
DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE
TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD
NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE, MANUFACTURER CHOOSES THESE
VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE
EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE
EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUTHER NO DESIGN-MAXIMUM
VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE
OPERATING COMDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, SUPPLY-WORD TO WHEN TO WORST WAT INDIEQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND FINVIRONMENTAL CONDITIONS.