

TUNG-SOL

PENTAGRID

PHYSICAL SPECIFICATIONS

EMITTER	UNIPOTENTIAL CATHODE	PIN CONNECTIONS			
BASE	LOCKING-IN - 8 PIN	PIN 1	HEATER	PIN 7	CATHODE
CAP	NONE	PIN 2	PLATE	PIN 8	HEATER
BULB	T-9	PIN 3	GRIDS #2 & #4		
MAXIMUM DIAMETER	1 3/16"	PIN 4	GRID #1		
MAXIMUM OVERALL LENGTH	2 25/32"	PIN 5	GRID #5	TOP CAP	NONE
MAXIMUM SEATED HEIGHT	2 1/4"	PIN 6	GRID #3		

RATINGS

HEATER OR FILAMENT VOLTAGE - NOMINAL (AC OR DC)	7.0	VOLTS
HEATER OR FILAMENT CURRENT - NOMINAL	0.32	AMP.
MAXIMUM PLATE VOLTAGE	300	VOLTS
MAXIMUM SCREEN VOLTAGE (GRIDS #2 & #4)	100	VOLTS
MAXIMUM SCREEN SUPPLY VOLTAGE	300	VOLTS
MAXIMUM PLATE DISSIPATION		WATTS
MAXIMUM SCREEN DISSIPATION	1.0	WATT
MAXIMUM TOTAL PLATE AND SCREEN DISSIPATION	2.0	WATTS
MAXIMUM TOTAL CATHODE CURRENT	14	MA.
MINIMUM EXTERNAL SIGNAL GRID BIAS VOLTAGE* (GRID #3)	0	VOLTS
MAXIMUM ANODE-GRID VOLTAGE		VOLTS
MAXIMUM ANODE-GRID SUPPLY VOLTAGE		VOLTS
MAXIMUM ANODE-GRID DISSIPATION		WATT

* WITH SELF-EXCITED OSCILLATOR

CAPACITANCES⁵

SIGNAL GRID TO MIXER PLATE (GRID #3 TO PLATE)	0.20 ^{MAX.}	μ f
SIGNAL GRID TO OSC. GRID (GRID #3 TO GRID #1)	0.20 ^{MAX.}	μ f
SIGNAL INPUT (GRID #3 TO ALL OTHER ELECTRODES)	9.0	μ f
OSC. GRID TO CATHODE (GRID #1 TO CATHODE)	2.2	μ f
OSC. GRID TO PLATE (GRID #1 TO PLATE)	0.15 ^{MAX.}	μ f
OSC. INPUT (GRID #1 TO ALL OTHER ELECTRODES)	7.0	μ f
OSC. GRID TO ALL OTHER ELECTRODES EXCEPT CATHODE	5.0	μ f
MIXER OUTPUT (PLATE TO ALL OTHER ELECTRODES)	9.0	μ f
CATHODE TO ALL OTHER ELECTRODES EXCEPT GRID #1	6.0	μ f

⁵ WITH EXTERNAL SHIELD CONNECTED TO BASE SHELL

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CONVERTER SERVICE

HEATER OR FILAMENT VOLTAGE	6.3	6.3	VOLTS
HEATER OR FILAMENT CURRENT	0.3	0.3	AMP.
PLATE VOLTAGE	100	250	VOLTS
SCREEN VOLTAGE	100	100	VOLTS
CONTROL GRID VOLTAGE	-2	-2	VOLTS
ANODE-GRID VOLTAGE			VOLTS
PLATE CURRENT	3.3	3.5	MA.
SCREEN CURRENT	8.5	8.5	MA.
ANODE-GRID CURRENT			MA.
OSCILLATOR-GRID CURRENT	0.5	0.5	MA.
TOTAL CATHODE CURRENT	12.3	12.5	MA.
OSCILLATOR-GRID RESISTOR	20000	20000	OHMS
PLATE RESISTANCE (APPROX.)	0.5	1.0	MEG OHM
CONVERSION TRANSCONDUCTANCE	525	550	μ MHOS
FOR CONTROL GRID VOLTAGE = -2 VOLTS			
CONVERSION TRANSCONDUCTANCE	275	300	μ MHOS
FOR CONTROL GRID VOLTAGE = -6 VOLTS			
CONVERSION TRANSCONDUCTANCE (APPROX.)	2	2	μ MHOS
FOR CONTROL GRID VOLTAGE = -35 VOLTS			
SUPPRESSOR GRID (GRID #5)	0	0	VOLTS