

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)	14.0	VOLTS
HEATER OR FILAMENT CURRENT - NOMINAL	0.16	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-EXCITATED OSCILLATOR

CAPACITANCES^S

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

^S WITH EXTERNAL SHIELD CONNECTED TO BASE SHELL

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CONVERTER SERVICE

HEATER OR FILAMENT VOLTAGE	12.6	12.6	VOLTS
HEATER OR FILAMENT CURRENT	0.15	0.15	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	20,000	20,000	OHM.
PLATE RESISTANCE (APPROX.)	0.5	1.0	MEGOHM
CONVERSION TRANSCONDUCTANCE	525	550	μMHOS
FOR CONTROL GRID VOLTAGE = -2 VOLTS			
CONVERSION TRANSCONDUCTANCE	275	300	μMHOS
FOR CONTROL GRID VOLTAGE = -6 VOLTS			
CONVERSION TRANSCONDUCTANCE (APPROX.)	2	2	μMHOS
FOR CONTROL GRID VOLTAGE = -35 VOLTS			
SUPPRESSOR GRID (GRID #5)	0	0	VOLTS