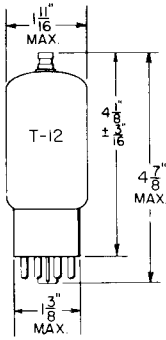


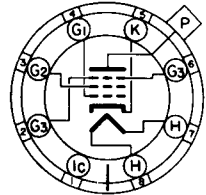
**TUNG-SOL**



**GLASS BULB**  
SMALL CAP  
WITH GROOVE

**PENTODE**

COATED UNIPOTENTIAL CATHODE  
HEATER  
6.3 VOLTS 0.15 AMP.  
AC OR DC  
ANY MOUNTING POSITION



**BOTTOM VIEW**  
MEDIUM-SHELL  
8 PIN OCTAL

THE 6BU5 IS A HIGH VOLTAGE BEAM PENTODE DESIGNED PRIMARILY FOR USE AS A SHUNT VOLTAGE REGULATOR IN THE HIGH VOLTAGE POWER SUPPLY OF COLOR TELEVISION RECEIVERS. IT HAS LOW CURRENT REQUIREMENTS AND EXHIBITS A SHARP CUT-OFF CHARACTERISTIC.

**DIRECT INTERELECTRODE CAPACITANCES - APPROX.**  
WITH NO EXTERNAL SHIELD

GRID #1 TO PLATE	0.024	μf
INPUT	3.0	μf
OUTPUT	0.9	μf

**RATINGS**

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM  
TV HIGH VOLTAGE REGULATOR SERVICE

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK	200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM PLATE VOLTAGE	20 000	VOLTS
MAXIMUM GRID #2 VOLTAGE	100	VOLTS
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	0	VOLTS
MAXIMUM NEGATIVE DC GRID #1 VOLTAGE	50	VOLTS
MAXIMUM PLATE DISSIPATION	20	WATTS
MAXIMUM GRID #2 DISSIPATION	0.1	WATT
MAXIMUM CATHODE CURRENT	2.5	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE	SEE RATING CHART	

**TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS**

AVERAGE CHARACTERISTICS

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.15	AMP.
PLATE VOLTAGE	20 000	20 000
SUPPRESSOR VOLTAGE	0	0
GRID #2 VOLTAGE	70	70
GRID #1 VOLTAGE	-3.4	-2.4
PLATE CURRENT	0.55	1.0
GRID #2 CURRENT	---	0.4
GRID #1 VOLTAGE (APPROX.) $I_b = 30 \mu\text{AMP.}$	---	-6.5

CONTINUED ON FOLLOWING PAGE

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## TUNG-SOL

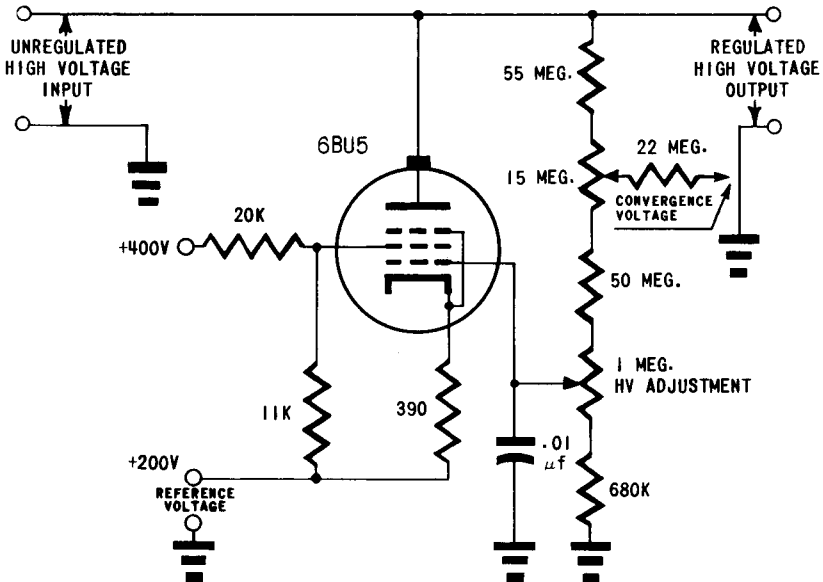
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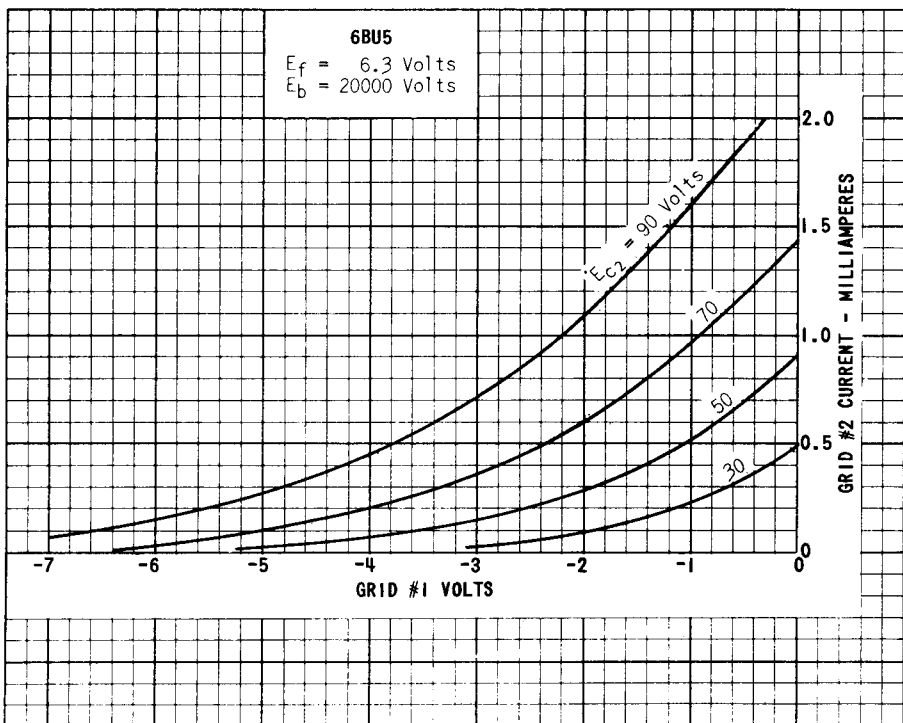
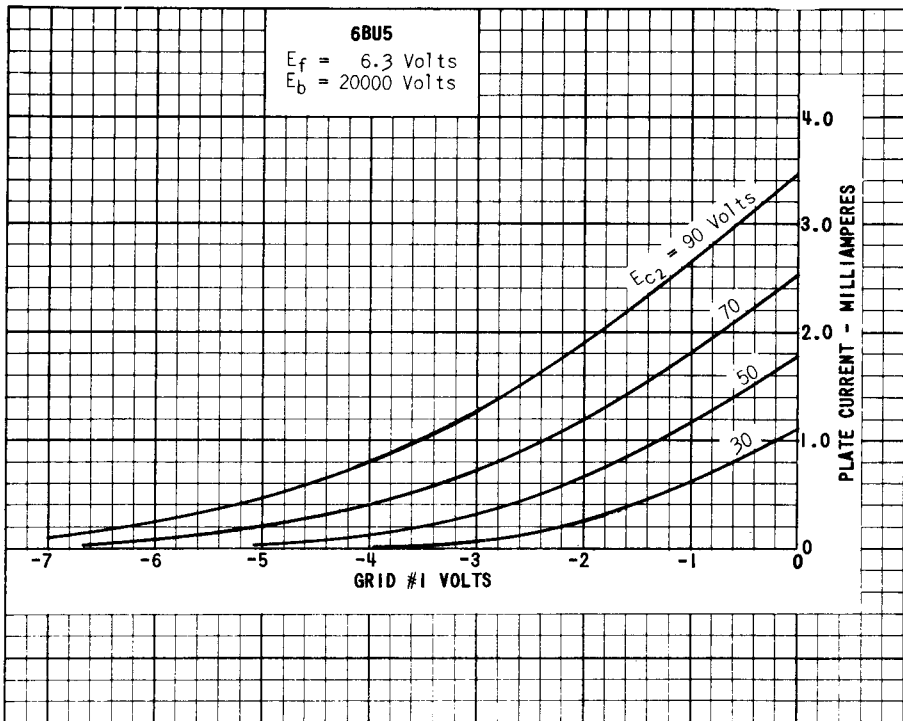
## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS - CONT'D

TV HIGH-VOLTAGE REGULATOR SERVICE  
SEE CIRCUIT DIAGRAM

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	0.15	AMP.
UNREGULATED DC SUPPLY VOLTAGE	29 900	VOLTS
EQUIVALENT RESISTANCE OF UNREGULATED SUPPLY	8.5	MEG OHMS
GRID #2 VOLTAGE	70	VOLTS
DC REFERENCE VOLTAGE	200	VOLTS
SUPPRESSOR VOLTAGE	0	VOLTS
DC LOAD CURRENT	0	1.0 MA.
DC PLATE CURRENT	1.0	0.05 MA.
DC GRID #2 CURRENT	0.5	0.03 MA.
REGULATED DC OUTPUT VOLTAGE	20 000	19 600 VOLTS

NOTE: HIGH VOLTAGE OPERATION OF THE 6BU5 CAN RESULT IN THE PRODUCTION OF X-RAYS WHICH CAN CONSTITUTE A HEALTH HAZARD UNLESS THESE TUBES ARE ADEQUATELY SHIELDED. THE NEED FOR THIS PRECAUTION SHOULD BE CONSIDERED IN EQUIPMENT DESIGN. RELATIVELY SIMPLE SHIELDING SHOULD PROVE ADEQUATE.





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# 6BU5

