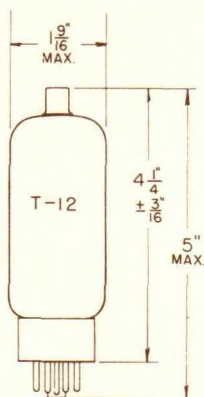


TUNG-SOL

BEAM POWER PENTODE



GLASS BULB

SMALL CAP

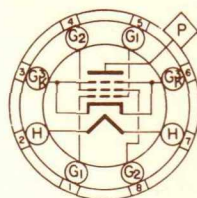
UNIPOTENTIAL CATHODE

HEATER

 $6.3 \pm 10\%$ VOLTS 2.5 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

SMALL MEDIUM-SHELL
8-PIN OCTAL

WITH EXTERNAL BARRIERS

8JC

THE 6DQ5 IS A HIGH SERVICE BEAM POWER PENTODE DESIGNED FOR USE AS A HORIZONTAL-DEFLECTION AMPLIFIER IN COLOR TELEVISION RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE	0.5	$\mu\mu\text{f}$
GRID #1 TO: (K+G ₃ +H & G ₂)	23	$\mu\mu\text{f}$
PLATE TO: (K+G ₃ +H & G ₂)	11	$\mu\mu\text{f}$

RATINGS^A ←

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HORIZONTAL DEFLECTION AMPLIFIER

HEATER VOLTAGE	$6.3 \pm 10\%$	VOLTS
MAXIMUM PLATE VOLTAGE:		
DC (INCLUDING BOOST)	990	VOLTS
PEAK POSITIVE-PULSE (ABS. MAX.) ^B	6 500 ^C	VOLTS
PEAK NEGATIVE-PULSE ^B	1 100	VOLTS
MAXIMUM DC GRID #2 (SCREEN-GRID) VOLTAGE	190	VOLTS
MAXIMUM PEAK NEGATIVE-PULSE GRID #1 (CONTROL-GRID) VOLTAGE	250	VOLTS
MAXIMUM CATHODE CURRENT:		
DC	315	MA.
PEAK	1 100	MA.
MAXIMUM GRID #2 INPUT	3.2	WATTS
MAXIMUM PLATE DISSIPATION ^D	24	WATTS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

RATINGS — CONT'D. A

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HORIZONTAL DEFLECTION AMPLIFIER

MAXIMUM PEAK HEATER-CATHODE VOLTAGE:

HEATER NEGATIVE WITH RESPECT TO CATHODE

200 VOLTS

HEATER POSITIVE WITH RESPECT TO CATHODE

200^E VOLTS

BULB TEMPERATURE (AT HOTTEST POINT

ON BULB SURFACE)

220 ← °C

MAXIMUM CIRCUIT VALUES

GRID #1 CIRCUIT RESISTANCE:

FOR GRID RESISTOR-BIAS OPERATION^D

0.47 MEGOHM

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS**CLASS A₁ AMPLIFIER**

HEATER VOLTAGE	6.3	6.3	6.3	VOLTS
HEATER CURRENT	2.5	2.5	2.5	AMP.
PLATE VOLTAGE	125	70	175	VOLTS
GRID #2 (SCREEN-GRID) VOLTAGE	125	125	125	VOLTS
GRID #1 (CONTROL-GRID) VOLTAGE	-25	0	-25	VOLTS
MU-FACTOR, GRID #2 TO GRID #1	3.3	---	---	
PLATE RESISTANCE (APPROX.)	---	---	5 500	OHMS
TRANSCONDUCTANCE	---	---	10 500	μMHOS
GRID VOLTAGE (APPROX.) FOR PLATE CURRENT OF 1 MA.	---	---	-55	VOLTS
PLATE CURRENT	---	550 ^F	110	MA.
GRID #2 CURRENT	---	42 ^F	5	MA.

^A AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE CONCERNING TELEVISION BROADCAST STATIONS", FEDERAL COMMUNICATIONS COMMISSION.

^B THIS RATING IS APPLICABLE WHERE THE DURATION OF THE VOLTAGE PULSE DOES NOT EXCEED 15 PERCENT OF ONE HORIZONTAL SCANNING CYCLE. IN A 525-LINE, 30-FRAME SYSTEM 15 PER CENT OF ONE HORIZONTAL SCANNING CYCLE IS 10 μSECONDS.

^C UNDER NO CIRCUMSTANCES SHOULD THIS ABSOLUTE VALUE BE EXCEEDED.

^D IT IS ESSENTIAL THAT THE PLATE DISSIPATION BE LIMITED IN THE EVENT OF LOSS OF GRID SIGNAL. FOR THIS PURPOSE, SOME PROTECTIVE MEANS SUCH AS A CATHODE RESISTOR OF SUITABLE VALUE SHOULD BE EMPLOYED.

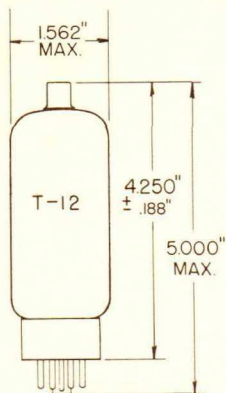
^E THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.

^F THESE VALUES CAN BE MEASURED BY A METHOD INVOLVING A RECURRENT WAVEFORM SUCH THAT THE PLATE DISSIPATION AND GRID #2 INPUT WILL BE KEPT WITHIN RATINGS IN ORDER TO PREVENT DAMAGE TO THE TUBE.

→ INDICATES A CHANGE.

TUNG-SOL

BEAM POWER PENTODE



GLASS BULB
SMALL CAP
SMALL MEDIUM-SHELL
8 PIN OCTAL B8-118
WITH EXTERNAL BARRIERS
STYLE B
OUTLINE DRAWING
JEDEC 12-22

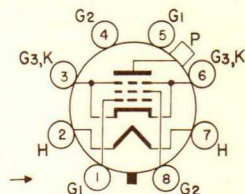
UNIPOTENTIAL CATHODE

HEATER

 6.3 ± 0.6 VOLTS 2.5 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 8JC

THE 6DQ5 IS A HIGH-PERVEANCE BEAM POWER PENTODE DESIGNED FOR USE AS A HORIZONTAL-DEFLECTION AMPLIFIER IN COLOR TELEVISION RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES - APPROX.

WITHOUT EXTERNAL SHIELD

GRID #1 TO PLATE	0.5	$\mu\mu\text{f}$
GRID #1 TO: ($K+G_3+H$ & G_2)	23	$\mu\mu\text{f}$
PLATE TO: ($K+G_3+H$ & G_2)	11	$\mu\mu\text{f}$

RATINGS^A

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HORIZONTAL DEFLECTION AMPLIFIER

MAXIMUM PLATE VOLTAGE:		
DC (INCLUDING BOOST)	990	VOLTS
PEAK POSITIVE-PULSE (ABS. MAX.) ^B	6 500 ^C	VOLTS
PEAK NEGATIVE-PULSE ^B	1 100	VOLTS
MAXIMUM DC GRID #2 (SCREEN-GRID) VOLTAGE	190	VOLTS
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MAXIMUM CATHODE CURRENT:		
DC	315	MA.
PEAK	1 100	MA.
MAXIMUM GRID #2 INPUT	3.2	WATTS
MAXIMUM PLATE DISSIPATION ^D	24	WATTS

CONTINUED ON FOLLOWING PAGE

→ INDICATES A CHANGE.

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

RATINGS — CONT'D. A

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HORIZONTAL DEFLECTION AMPLIFIER

MAXIMUM PEAK HEATER-CATHODE VOLTAGE:

HEATER NEGATIVE WITH RESPECT TO CATHODE	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	200 ^E	VOLTS
BULB TEMPERATURE (AT HOTTEST POINT ON BULB SURFACE)	220	°C

MAXIMUM CIRCUIT VALUES

GRID #1 CIRCUIT RESISTANCE:		
FOR GRID RESISTOR-BIAS OPERATION ^D	0.47	MEGOHM

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS
CLASS A₁ AMPLIFIER

PLATE VOLTAGE	125	70	175	VOLTS
GRID #2 (SCREEN-GRID) VOLTAGE	125	125	125	VOLTS
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MU-FACTOR, GRID #2 TO GRID #1	3.3	---	---	
PLATE RESISTANCE (APPROX.)	---	---	5 500	OHMS
TRANSCONDUCTANCE	---	---	10 500	μMHMS
GRID VOLTAGE (APPROX.) FOR PLATE CURRENT OF 1 MA.	---	---	-55	VOLTS
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