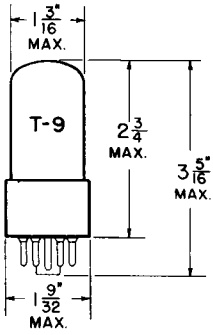
TUNG-SOL

DOUBLE TRIODE

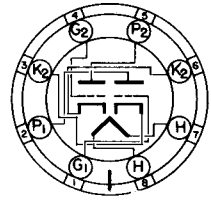


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
12.6 VOLTS 0.3 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
INTERMEDIATE SHELL
8 PIN OCTAL
8BD

THE 12SN7GT COMBINES TWO MEDIUM-MU TRIODES IN ONE ENVELOPE. IT IS DESIGNED FOR USE AS A RESISTANCE COUPLED AMPLIFIER, OR COMBINED VERTICAL OSCILLATOR AND VERTICAL DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES

WITH NO EXTERNAL SHIELD

	SECTION 1[A]	SECTION 2[B]	
GRID TO PLATE	3.8	4.0	μμf
INPUT	2.8	3.0	μμf
OUTPUT	0.8	1.2	μμf

[A] CONNECTED TO PINS 4, 5 AND 6.

[B] CONNECTED TO PINS 1, 2 AND 3.

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM[C]

EACH SECTION[C]

	CLASS A_1 AMPLIFIER	VERTICAL[D] DEFLECTION AMPLIFIER	
HEATER VOLTAGE	12.6		VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK	200		VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC	100		VOLTS
TOTAL DC AND PEAK	200		VOLTS
MAXIMUM PLATE VOLTAGE	300	300	VOLTS
MAXIMUM PEAK POSITIVE PLATE VOLTAGE (ABSOLUTE MAXIMUM)	---	1 200	VOLTS
MAXIMUM PLATE DISSIPATION			
EACH PLATE	3.5	3.5	WATTS
BOTH PLATES	5.0	5.0	WATTS
MAXIMUM PEAK NEGATIVE GRID VOLTAGE	---	250	VOLTS
MAXIMUM CATHODE CURRENT	20	20	MA.
MAXIMUM PEAK CATHODE CURRENT	---	70	MA.
MAXIMUM GRID CIRCUIT RESISTANCE	1.0	---	MEGOHMS
CATHODE BIAS	---	2.2	MEGOHMS

[C] UNLESS OTHER WISE SPECIFIED.

[D] FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCASTING STATIONS; FEDERAL COMMUNICATIONS COMMISSION". THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE SCANNING CYCLE.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

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RATINGS — CONT'D

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

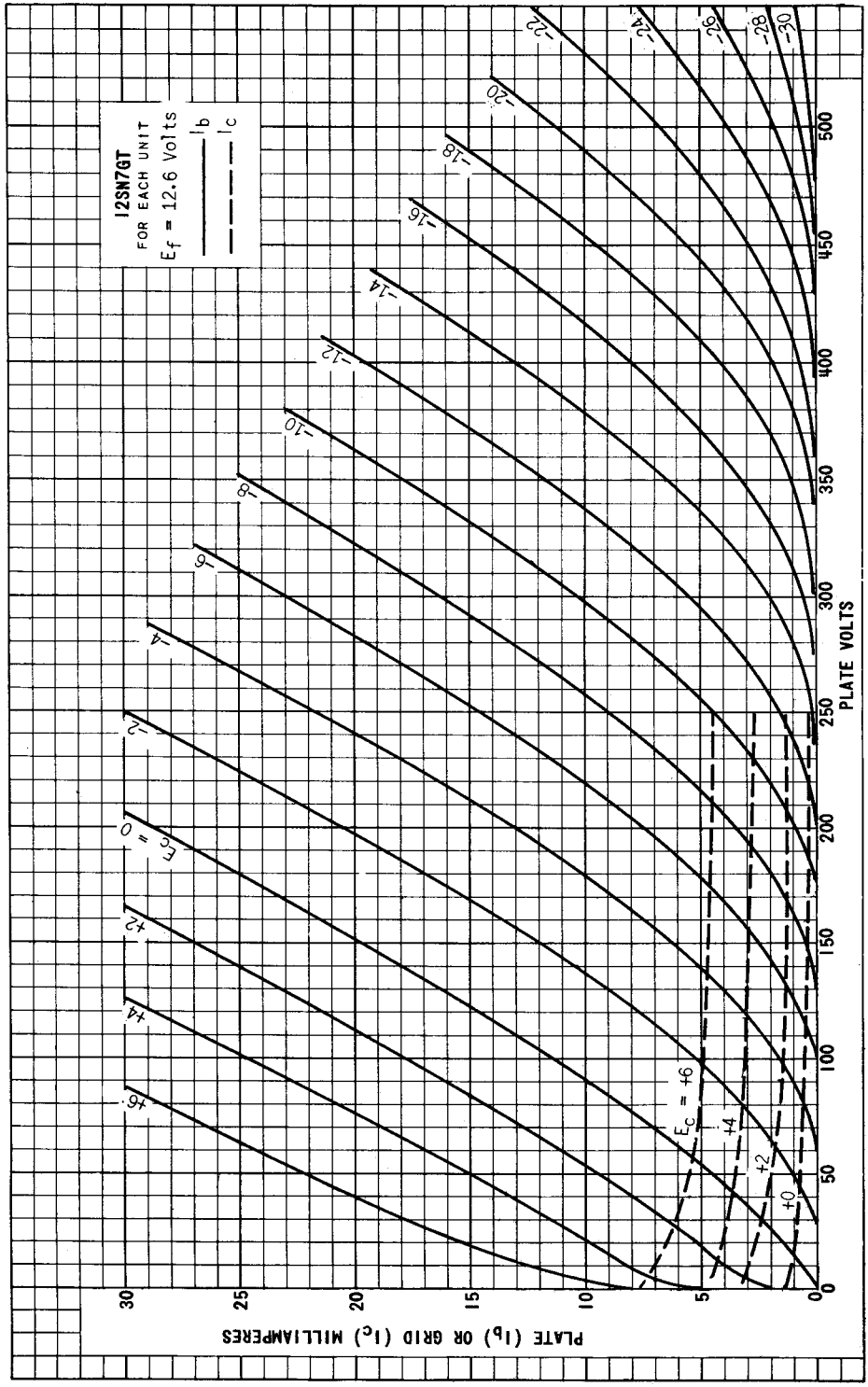
	VERTICAL[E] DEFLECTION OSCILLATOR	HORIZONTAL[E] DEFLECTION OSCILLATOR	
HEATER VOLTAGE	12.6		VOLTS
MAXIMUM HEATER–CATHODE VOLTAGE:			
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK	200		VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC	100		VOLTS
TOTAL DC AND PEAK	200		VOLTS
MAXIMUM PLATE VOLTAGE	300	300	VOLTS
MAXIMUM PLATE DISSIPATION			
EACH PLATE	3.5	3.5	WATTS
BOTH PLATES	5.0	5.0	WATTS
MAXIMUM PEAK NEGATIVE GRID VOLTAGE	400	600	VOLTS
MAXIMUM AVERAGE CATHODE CURRENT	20	20	MA.
MAXIMUM PEAK CATHODE CURRENT	70	300	MA.
MAXIMUM GRID CIRCUIT RESISTANCE	2.2	2.2	MEGOHMS

[E] FOR OPERATION IN A 525-LINE, 30-FRAME SYSTEM AS DESCRIBED IN "STANDARDS OF 'GOOD ENGINEERING PRACTICE FOR TELEVISION BROADCASTING STATIONS; FEDERAL COMMUNICATIONS COMMISSION". THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE SCANNING CYCLE.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	12.6		VOLTS
HEATER CURRENT	0.3		AMP.
PLATE VOLTAGE	90	250	VOLTS
GRID VOLTAGE	0	-8.0	VOLTS
PLATE CURRENT	10	9.0	MA.
PLATE RESISTANCE (APPROX.)	6 700	7 700	OHMS
TRANSCONDUCTANCE	3 000	2 600	μMHOS
AMPLIFICATION FACTOR	20	20	
PLATE CURRENT AT E_c = -12.5 VOLTS	---	1.3	MA.
GRID VOLTAGE FOR I_b = 10 μA. (APPROX.)	-7.0	-18	MA.



12SN7GT (6SN7GT)