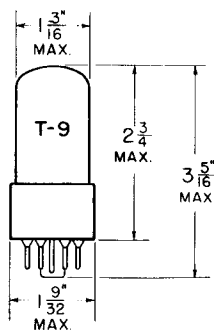


## TUNG-SOL

## PENTODE



GLASS BULB

## COATED FILAMENT

**SERIES FILAMENT**  
 $E_f$  APPLIED BETWEEN  
 PINS 2 AND 7  
 $E_{g1}$  REFERRED TO PIN 7

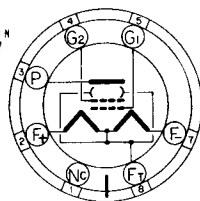
2.8 VOLTS  
 50 MA.

**PARALLEL FILAMENT**  
 $E_f$  APPLIED BETWEEN PIN  
 8 AND PINS 2 AND 7  
 TIED TOGETHER  
 $E_{g1}$  REFERRED TO PIN 8

1.4 VOLTS  
 100 MA.

AC OR DC

A SHUNTING RESISTOR MUST BE CONNECTED BETWEEN PINS 2 AND 8 FOR SERIES-FILAMENT OPERATION TO BY-PASS ANY CATHODE CURRENT IN EXCESS OF THE 6 MA. RATED MAXIMUM PER SECTION. AN ADDITIONAL SHUNTING RESISTOR MAY BE NECESSARY BETWEEN PINS 2 AND 7 IF OTHER TUBES USED IN SERIES-FILAMENT ARRANGEMENT CONTRIBUTE TO THE FILAMENT CURRENT OF THE 3Q5GT.



**BOTTOM VIEW**  
 INTERMEDIATE  
 SHELL  
 7 PIN OCTAL  
 7AP

ANY MOUNTING POSITION

THE 3Q5GT IS A FILAMENTARY TYPE BEAM POWER AMPLIFIER, CHARACTERIZED BY A LOW CURRENT DRAIN FILAMENT. IT IS DESIGNED FOR SERVICE IN THE OUTPUT STAGE OF THREE-WAY PORTABLE RECEIVERS.

**DIRECT INTERELECTRODE CAPACITANCES**  
 WITH NO EXTERNAL SHIELD

GRID TO PLATE: ( $G_1$ TO P)	0.6	$\mu\mu f$
INPUT: $G_1$ TO ( $F+G_2+BP$ )	8	$\mu\mu f$
OUTPUT: P TO ( $F+G_1+BP$ )	6.5	$\mu\mu f$

## RATINGS

INTERPRETED ACCORDING TO RMA STANDARD MB-210

	SERIES FILAMENT	PARALLEL FILAMENT	
FILAMENT VOLTAGE	2.8	1.4	VOLTS
MAXIMUM PLATE VOLTAGE	110	110	VOLTS
MAXIMUM GRID #2 VOLTAGE	110	110	VOLTS
MAXIMUM CATHODE CURRENT	6 <sup>A</sup>	12	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE (SELF OR FIXED BIAS)	1	1	MEGOHM

<sup>A</sup> FOR EACH 1.4 VOLT FILAMENT SECTION.

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER - SERIES FILAMENT

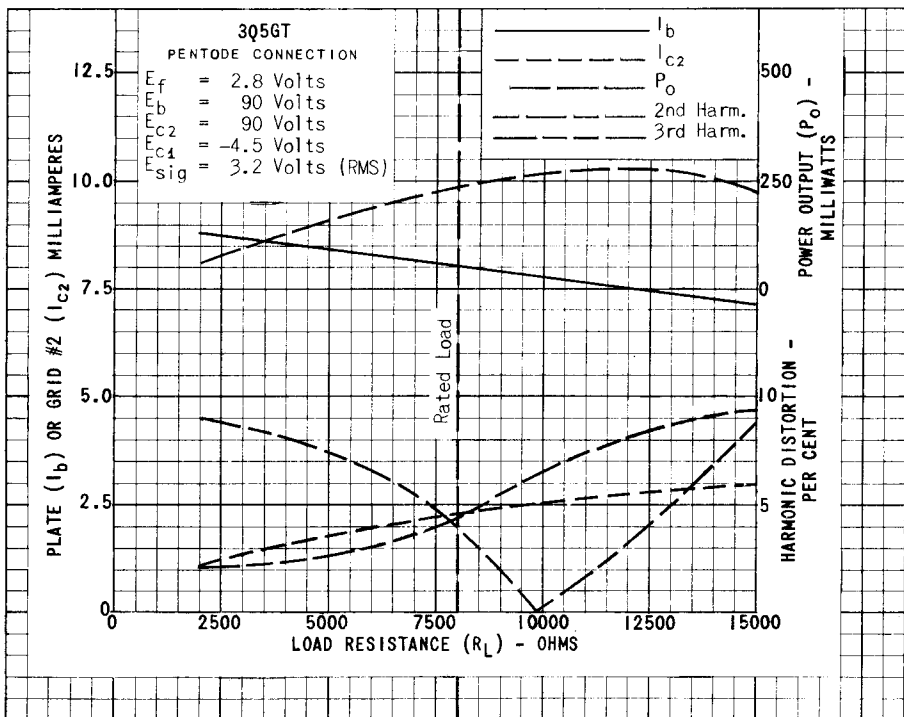
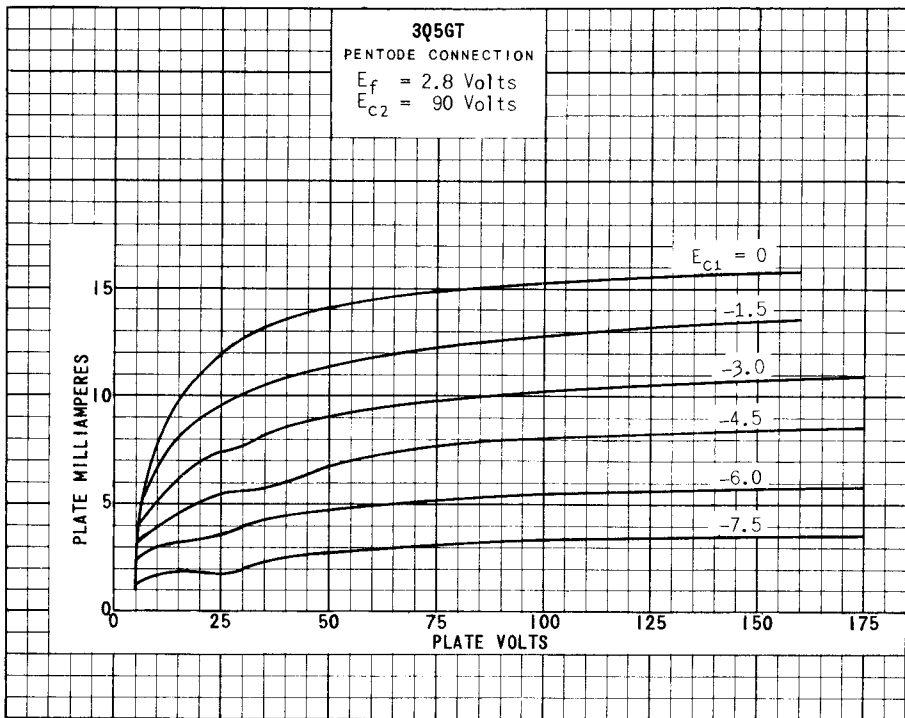
FILAMENT VOLTAGE	2.8	2.8	VOLTS
FILAMENT CURRENT	50	50	MA.
PLATE VOLTAGE	90	110	VOLTS
GRID #2 VOLTAGE	90	110	VOLTS
GRID #1 VOLTAGE	-4.5	-6.6	VOLTS
PEAK AF SIGNAL VOLTAGE <sup>B</sup>	4.5	5.1	VOLTS
PLATE RESISTANCE	0.08	0.11	MEGOHM
TRANSCONDUCTANCE	2 000	2 000	μMHOS
PLATE CURRENT	8	8.5	MA.
GRID #2 CURRENT	1	1.1	MA.
LOAD RESISTANCE	8 000	8 000	OHMS
TOTAL HARMONIC DISTORTION	8.5	8.5	PERCENT
POWER OUTPUT	230	330	MW

CLASS A<sub>1</sub> AMPLIFIER - PARALLEL FILAMENT

FILAMENT VOLTAGE	1.4	1.4	1.4	VOLTS
FILAMENT CURRENT	100	100	100	MA.
PLATE VOLTAGE	85	90	110	VOLTS
GRID #2 VOLTAGE	85	90	110	VOLTS
GRID #1 VOLTAGE	-5	-4.5	-6.6	VOLTS
PEAK AF SIGNAL VOLTAGE <sup>B</sup>	5	4.5	5.4	VOLTS
PLATE RESISTANCE	0.07	0.09	0.1	MEGOHM
TRANSCONDUCTANCE	1 950	2 200	2 200	μMHOS
PLATE CURRENT	7	9.5	10	MA.
GRID #2 CURRENT	0.8	1.3	1.4	MA.
LOAD RESISTANCE	9 000	8 000	8 000	OHMS
TOTAL HARMONIC DISTORTION	5.5	6	6	PERCENT
POWER OUTPUT	250	270	400	MW

<sup>B</sup> WITH PEAK AUDIO FREQUENCY SIGNAL EQUAL TO GRID BIAS VOLTAGE, THE POWER OUTPUT FOR THE 110 VOLT CONDITION IS 400 MW AT 10% DISTORTION FOR THE SERIES CONNECTION AND 500 MW AT 10% DISTORTION FOR THE PARALLEL CONNECTION.

*SIMILAR TYPE REFERENCES: Ratings and characteristics are identical to type 3LP4.*



PRINTED IN U. S. A.

PLATE 2269  
NOV. 1, 1949