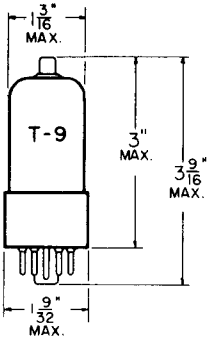
TUNG-SOL

TRIPLE-DIODE TRIODE

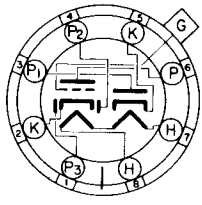


GLASS BULB
SKIRTED
MINIATURE CAP

COATED UNIPOTENTIAL CATHODES

HEATER
12.6 VOLTS 150 MA.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
INTERMEDIATE SHELL
8 PIN OCTAL BASE
8C3

THE 12S8GT COMBINES IN ONE ENVELOPE A HIGH-MU TRIODE AND THREE SEPARATE DIODES. ONE OF THE THREE DIODES HAS A SEPARATE CATHODE PERMITTING USE AS A BALANCED DISCRIMINATOR OR DETECTOR. IN COMBINATION FM/AM RECEIVERS THIS TUBE PROVIDES THE NECESSARY ELEMENTS FOR DETECTION OF BOTH TYPES OF SIGNAL WITHOUT NEED FOR ADDITIONAL SWITCHING.

DIRECT INTERELECTRODE CAPACITANCES

WITH EXTERNAL SHIELD #308 CONNECTED TO PIN 2

TRIODE GRID TO ANY DIODE PLATE (MAX.)	0.005	μμf
DIODE INPUT (EACH DIODE) (APPROX.)	1	μμf

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD MB-210

HEATER VOLTAGE	12.6	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE	90	VOLTS
MAXIMUM TRIODE PLATE VOLTAGE	300	VOLTS
MAXIMUM TRIODE PLATE DISSIPATION	0.5	WATT
MAXIMUM CONTINOUS DIODE CURRENT (EACH DIODE)	1	MA.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

HEATER VOLTAGE	12.6	12.6	VOLTS
HEATER CURRENT	150	150	MA.
TRIODE PLATE VOLTAGE	100	250	VOLTS
GRID VOLTAGE	-1	-2	VOLTS
GRID CIRCUIT RESISTOR	0	0	MEGOHM
TRIODE PLATE CURRENT	0.4	0.9	MA.
PLATE RESISTANCE (APPROX.)	110 000	91 000	OHMS
TRANSCONDUCTANCE	900	1 100	μMHOS
AMPLIFICATION FACTOR	100	100	
AVERAGE DIODE CURRENT WITH 10 VOLTS DC APPLIED (EACH DIODE)	2.5	2.5	MA.

ONE DIODE HAS A SEPARATE CATHODE, THE OTHER CATHODE IS COMMON TO TWO DIODES AND THE TRIODE UNIT.

IT IS RECOMMENDED THAT DIODE #1 (PIN 3) AND DIODE #3 (PIN 1) BE USED IN BALANCED DETECTOR CIRCUITS.

→ INDICATES A CHANGE OR ADDITION.

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CONTINUED FROM PRECEDING PAGE

RESISTANCE COUPLED AMPLIFIER

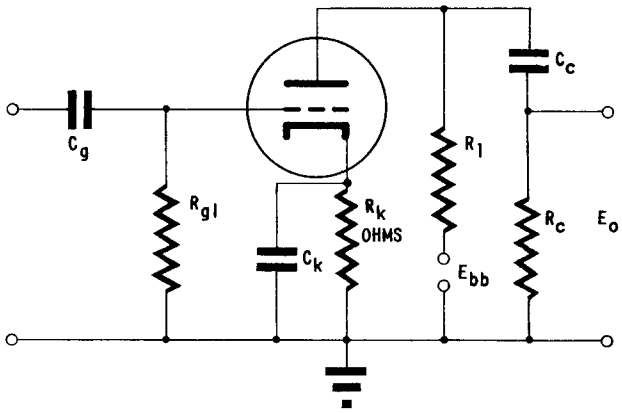
R1 MEG.	Rg1 MEG.	Rc MEG.	Ebb = 90 VOLTS			Ebb = 180 VOLTS			Ebb = 300 VOLTS		
			Rk	GAIN	Eo	Rk	GAIN	Eo	Rk	GAIN	Eo
0.1	A	0.1	6800	25	6	4700	27	10	2200	36	29
0.1	A	0.27	8200	29	7	4700	35	15	2700	45	35
0.27	A	0.27	10000	35	9	6800	44	19	4700	53	42
0.27	A	0.47	12000	39	10	6800	48	21	5600	56	48
0.47	A	0.47	18000	39	10	10000	45	24	8200	58	51
0.47	A	1	18000	46	15	12000	54	29	9100	63	59
0.27	10	0.27	---	34	5	---	54	20	---	58	40
0.27	10	0.47	---	38	6	---	57	25	---	60	49
0.47	10	0.47	---	39	7	---	60	23	---	62	47
0.47	10	1	---	42	9.5	---	65	33	---	70	63

[A] VALUE OF Rg1 IS NOT CRITICAL.

Rk TAKEN TO NEAREST RMA VALUE FOR EACH CASE INSTEAD OF ABSOLUTE OPTIMUM VALUE.

Eo IS RMS OUTPUT AT 5% TOTAL HARMONIC DISTORTION.

GAIN MEASURED AT Eo = 2.0 VOLTS RMS OUTPUT.



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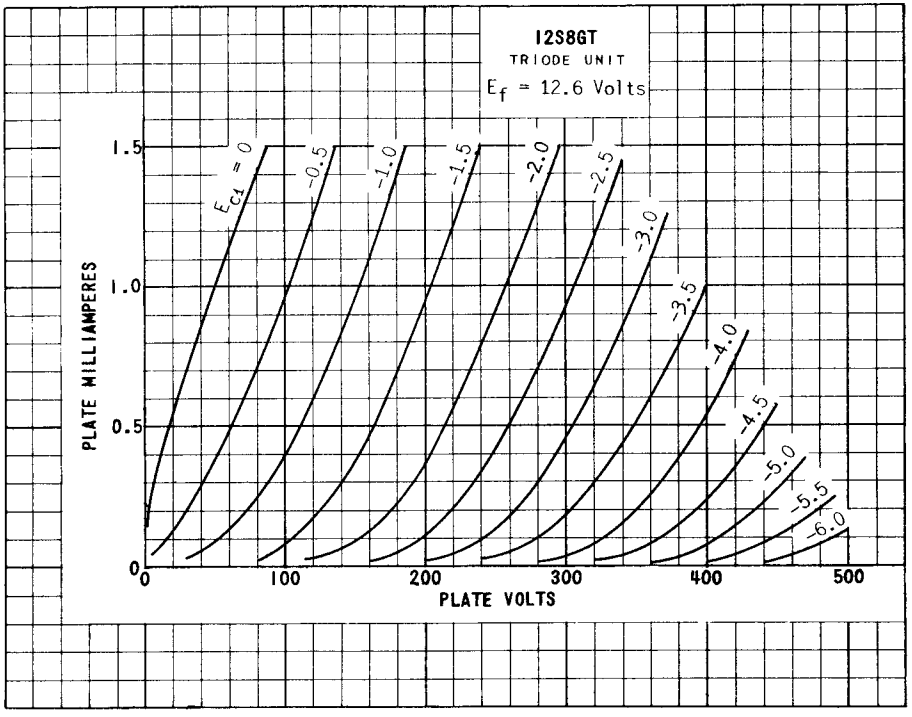
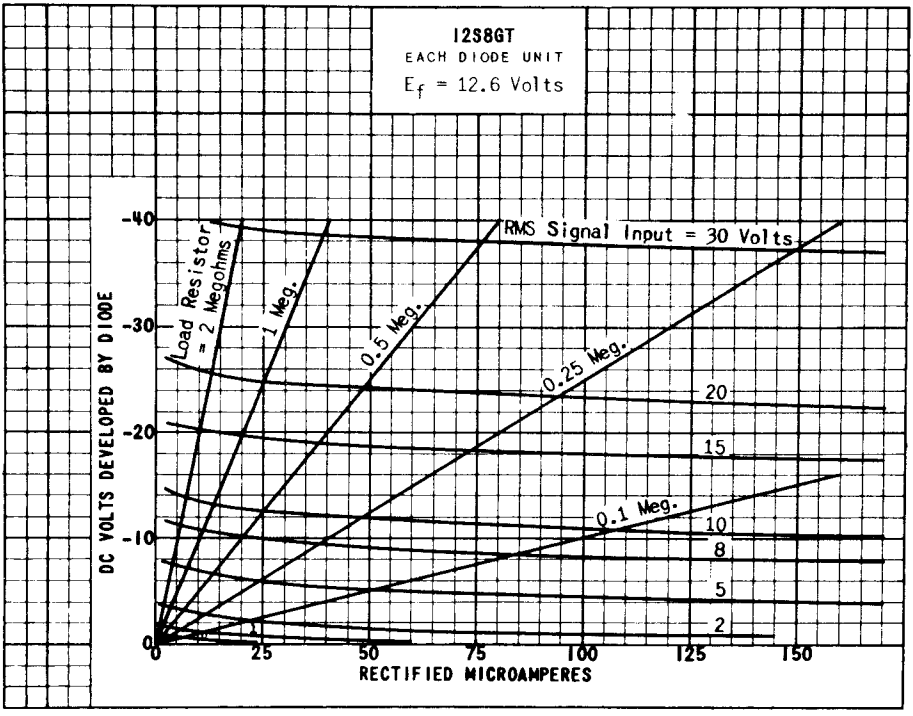
→ INDICATES A CHANGE OR ADDITION.





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