

May 15, 1958

HALF-WAVE VACUUM RECTIFIER TYPE 1B3-GT

The 1B3-GT is a glass octal directly heated diode designed for service as a high voltage, low current rectifier. This tube is particularly well suited for service as the high voltage rectifier in television receivers because it has very good insulation between plate and filament and requires only 200 milliamperes of filament current.

GENERAL DATA

ELECTRICAL:

Filament (Coated):		
Voltage (ac or dc)	1.25 ▲	Volts
Current	0.20	Ampere
Direct Interelectrode Capacitances (Unshielded):		
Plate to Filament	1.3	uuf

MECHANICAL:

Bulb	T-9
Base	Intermediate Shell Octal (JETEC B5-82, B6-8, B7-166) Short Intermediate Shell Octal (JETEC B5-85, B6-60, B7-147)
Outline	9-51 or 9-52
Basing	3C
Mounting Position	Any

MAXIMUM RATINGS

DESIGN-CENTER VALUES:

(Except as Indicated)	Flyback Rectifier	RF Voltage Rectifier	
Inverse Plate Voltage	21000 max.	-	Volts
DC Component	26000 max.	33000 abs. max.	Volts
Total DC and Peak			
Steady-State Peak Plate Current	50	30	max. Ma.
DC Output Current	0.5	1.0	max. Ma.
Frequency of Supply Voltage			
Maximum	-	100	max. Kc.
Minimum	-	1.5	min. Kc.

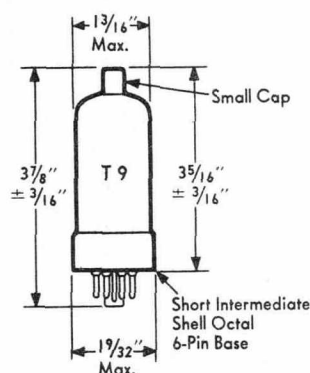
AVERAGE CHARACTERISTICS

Tube Voltage Drop (Approx.) .	
With Plate Current of	
7.0 Ma. dc.	100 Volts

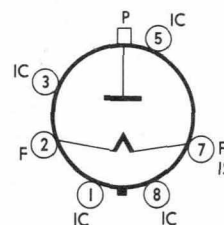
- ▲ For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Stations, Federal Communications Commission". The duty cycle of the voltage pulse must not exceed 15 per cent of one scanning cycle.

- ▲ The filament voltage must never be less than 1.05 volts or more than 1.45 volts.

Inasmuch as the tube rating permits operation at high voltage, shielding of the tube for x-ray radiation may be needed.



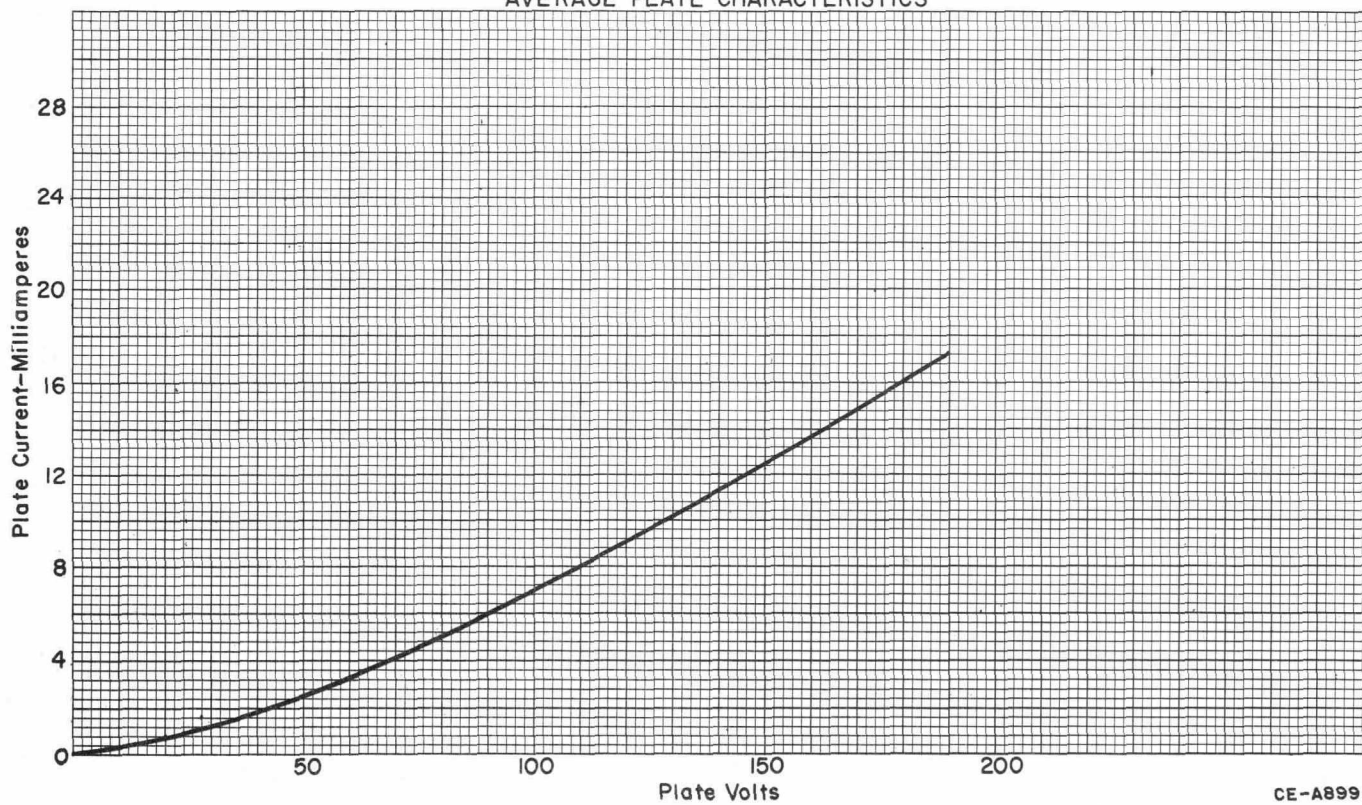
CE-A574



BOTTOM VIEW

Socket Terminals 1, 3, 4, 5, 6 and 8 shall not be used as tie points although terminals 1, 3, 5 and 8 may be connected to terminal 7 to reduce corona discharge.

AVERAGE PLATE CHARACTERISTICS



CE-A899