

November 1, 1959

TV HIGH VOLTAGE RECTIFIER TYPE 1K3

The 1K3 is a glass octal, directly heated half wave rectifier designed for service as the high voltage rectifier in flyback type picture tube anode power supplies. Compact size is achieved with high inter-element insulation and high inverse voltage ratings.

GENERAL DATA

ELECTRICAL:

Filament (Coated):	
Voltage (ac or dc)	1.25* Volts
Current	0.2 Ampere
Direct Interelectrode Capacitances (Unshielded):	
Plate to Filament	1.6 uuf

MECHANICAL:

Bulb	T-9
Base	Intermediate-Shell Octal 6-Pin (JETEC B6-8)
	Short Intermediate-Shell Octal 6-Pin (JETEC B6-60)
Basing	3C
Mounting Position	Any

FLYBACK RECTIFIER SERVICE†

MAXIMUM RATINGS:

Design-Maximum Values ▲

Peak Inverse Plate Voltage:	
DC Component	22000 max. Volts
Total DC and Peak	26000 max. Volts
Steady-State Peak Plate Current	50 max. Ma.
DC Output Current	0.5 max. Ma.

AVERAGE CHARACTERISTICS:

Tube Voltage Drop, approx.:	
Plate Current = 7.0 Ma.	225 Volts

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

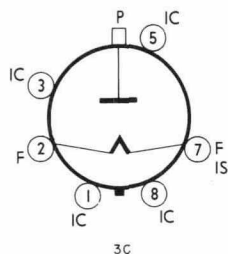
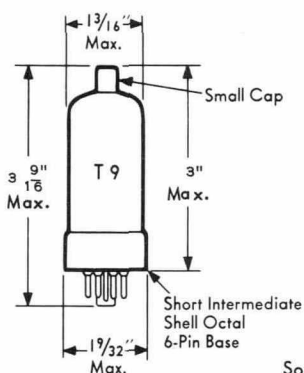
† For operation in a 525-line, 30-frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Station, Federal Communications Commission". The duty cycle of the voltage pulse must not exceed 15 per cent of one scanning cycle.

▲ Design-Maximum ratings are limiting values of operating and environmental conditions applicable to a bogey tube of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions.

The tube manufacturer chooses these values to provide acceptable serviceability of the tube, taking responsibility for the effects of changes in operating conditions due to variations in tube characteristics.

The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, and environmental conditions.

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



BOTTOM VIEW

Socket terminals 4 and 6 may be used as tie points as or near filament potential. Terminals 1,3,4,5,6, and 8 may be connected to terminal 7 to reduce corona discharge.