



6H6

Description and Rating

TWIN DIODE

GENERAL DESCRIPTION

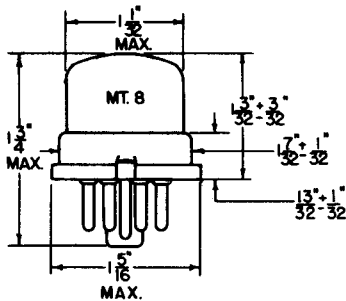
Principal Application: The type 6H6 is a twin-diode with individual cathodes brought out to separate base pins. The 6H6 is designed for ser-

vice as a diode detector, automatic volume control rectifier, or as a low current power rectifier.

Cathode: Coated Unipotential
 Heater Voltage (A-C or D-C) 6.3 Volts
 Heater Current 0.3 Ampere
 Envelope MT-8 Metal Shell
 Base: B7-22 Small Wafer Octal 7-Pin Phenolic

Mounting Position: Any
 Direct Interelectrode Capacitances: *
 Plate No. 1 to Cathode No. 1* 3.0 $\mu\mu\text{f}$
 Plate No. 2 to Cathode No. 2* 3.4 $\mu\mu\text{f}$
 Plate No. 1 to Plate No. 2 (Max)** 0.10 $\mu\mu\text{f}$

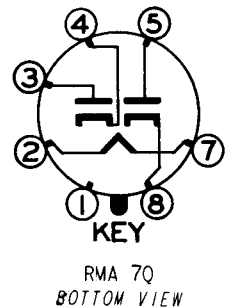
PHYSICAL DIMENSIONS



TERMINAL CONNECTIONS

- Pin 1 - Shell and Internal Shield
- Pin 2 - Heater
- Pin 3 - Plate Number 2
- Pin 4 - Cathode Number 2
- Pin 5 - Plate Number 1
- Pin 7 - Heater
- Pin 8 - Cathode Number 1

BASING DIAGRAM



MAXIMUM RATINGS

	Design Center	Absolute	
Peak Inverse Voltage	420	465	Volts
Peak Plate Current per Plate	48	53	Milliamperes
A-C Plate Voltage per Plate (RMS)	150	165	Volts
D-C Output Current per Plate	8.0	8.8	Milliamperes
D-C Heater-Cathode Voltage	330	365	Volts

CHARACTERISTICS AND TYPICAL OPERATION

HALF-WAVE RECTIFIER °

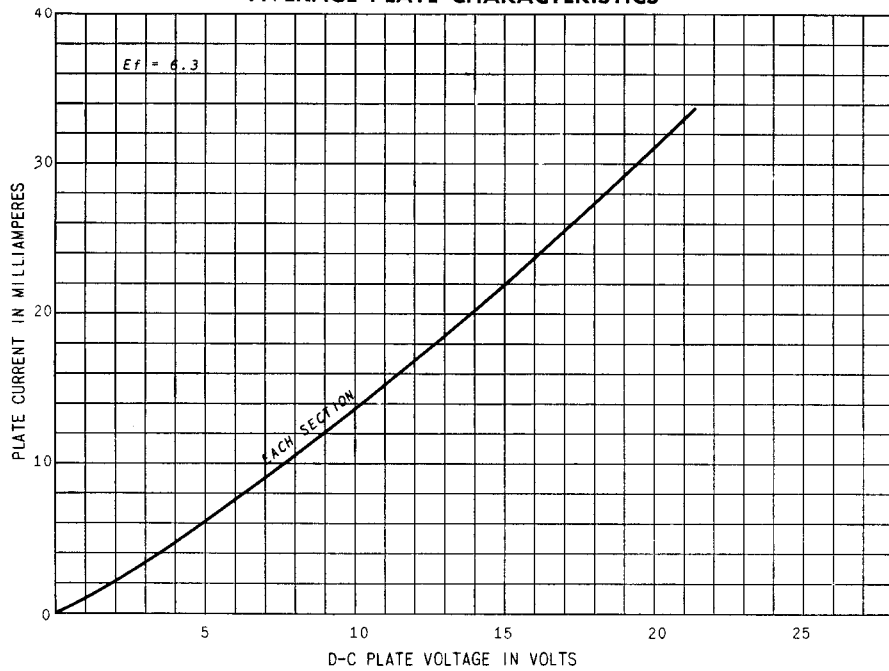
Heater Voltage (A-C or D-C)	6.3	6.3	Volts
A-C Plate Voltage per Plate (RMS)	117	150	Volts
Minimum Total Effective Plate-Supply Impedance per Plate #	15	40	Ohms
Maximum D-C Output Current per Plate	8	8	Milliamperes

VOLTAGE DOUBLER

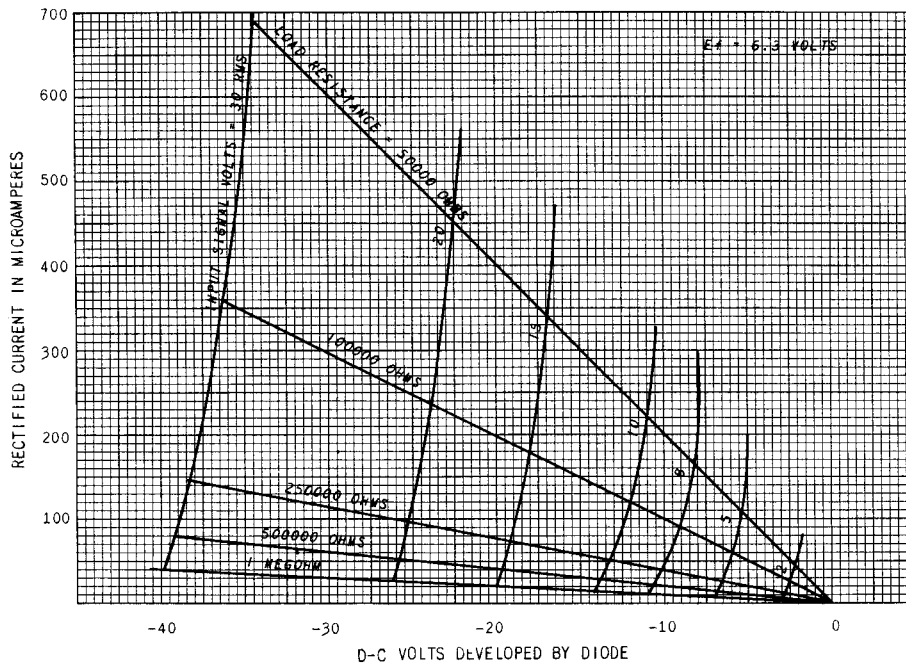
	Half-Wave	Full-Wave	
Heater Voltage (A-C or D-C)	6.3	6.3	Volts
A-C Plate Voltage per Plate (RMS)	117	117	Volts
Minimum Total Effective Plate-Supply Impedance per Plate #	30	15	Ohms
Maximum D-C Output Current per Plate	8	8	Milliamperes

- * With Shell and internal shield and heater connected to cathode of unit under test.
- ** With shell and internal shield, heater and cathodes connected to ground.
- o When operated as a half-wave rectifier the two units may be used separately or in parallel.
- # When filter condensers larger than 40 microfarads are used it may be necessary to add additional plate-supply impedance to limit the peak plate current to the rated maximum.

AVERAGE PLATE CHARACTERISTICS



OPERATION CHARACTERISTICS
HALF-WAVE EACH SECTION



Electronics Department



Schenectady, N. Y.