# TYPE 6H6

### DUODIODE

Heater Voltage





#### CHARACTERISTICS

Heater Current	×			٠				ě		0.	3	Ampere	
Direct Interelectre	ode	C	apa	aci	ta	nc	e:		W.				
Plate No. 1 to Plate N	o. 2									0.0	2	μμf Max.	
Maximum Over-all Leng	th											15%"	
Maximum Diameter .												1.4."	
Base—Small Octal 7-Pin												7-Q	

## Operating Conditions and Characteristics:

A-C Voltage per Plate									100	Max. Volts
D-C Output Current	12	•	. (*)	14		10			4	Max. Ma.

#### CIRCUIT APPLICATION

Sylvania 6H6 is the duodiode metal type tube. Physically it is

the smallest in the present line of metal tubes.

Sylvania 6H6 consists of two separate diode plates, each being associated with an individual cathode. The cathodes are brought out to separate base pins. Both sets of elements are shielded from one another. This arrangement offers several possibilities for circuit connections which are not possible with other duodiode tubes, such as Types 75 and 85, that incorporate additional tube elements but have a common cathode.

If the cathodes are connected, conventional full-wave and half-

wave circuits may be readily obtained.

It is possible to secure any amount of a-v-c delay desired by connecting the cathode of one section to a positive point in the system, such as a tap on the cathode bias resistor in the r-f stage of the receiver. The grid return for the diode is then brought to ground, thereby placing a negative bias on the diode plate. The value of this voltage determines the amount of delay obtained. This diode circuit is usually employed to furnish the a-v-c voltage for the receiver.

The second diode may then be used as a detector, operated with or without a bias depending upon the results desired. The bias applied in the detector circuit should not be too high; otherwise, poor quality may result due to plate current cut-off on the negative

signal voltage peaks.