



# ELECTRON TUBE DIVISION

INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION  
BOX 100 EASTON, PA. 18043

## 7178 HYDROGEN DIODE

### DESCRIPTION

The 7178 is a glass envelope hydrogen filled diode designed for Pulse Transformer Back swing Clipper Applications. The indirectly heated cathode, the internal hydrogen reservoir, and the rugged anode design of the 7178 combine to produce reliable service and long life.

### ELECTRICAL DATA, GENERAL

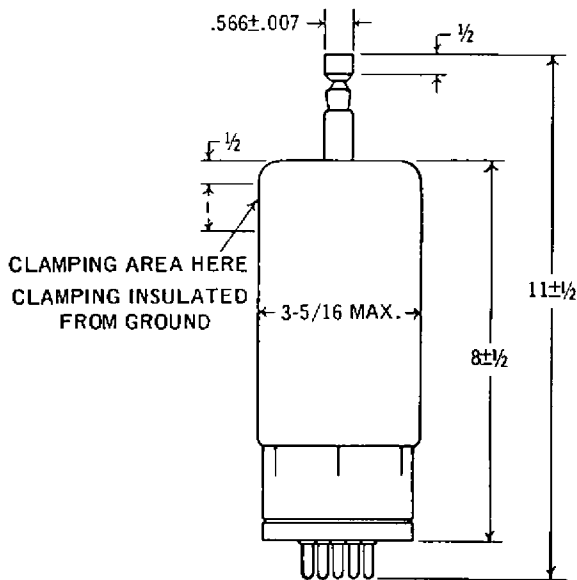
	Nom.	Min.	Max.			
Heater Voltage	5.0	4.7	5.3	Volts AC	Reservoir Current (at 5.0 volts)	2.0 5.0 Amperes
Heater Current (at 5.0 volts)		14.0	24.0	Amperes	Minimum Heating Time	10 Minutes
Reservoir Voltage	5.0	4.7	5.3	Volts AC		

### MECHANICAL DATA, GENERAL

Mounting Position	Any	Net Weight	1.5 Pounds
Base (Per outline)		Dimensions (Per outline)	
Cooling (Note 1)			

### RATINGS (Note 2)

Max. Peak Anode Voltage, Inverse, Transient (Note 3)	30.0 KV	Max. R.M.S. Anode Current (Note 4)	15.0 Amps.
Max. Peak Anode Voltage, Inverse, Operating	16.0 KV	Min. Anode Voltage	500.0 Volts
Max. Peak Anode Current	500.0 Amps.	Ambient Temperature	-50° to +75° C
Max. Average Anode Current	0.50 Amps.		



#### NOTE 1

Cooling of the Anode lead is permissible, but there shall be no Air blast directly on the bulb.

#### NOTE 2

Maximum ratings should not occur simultaneously. In special cases maximum ratings may be exceeded. Consult Applications Department.

#### NOTE 3

The 7173 will withstand transient, overvoltage conditions of  $e_{px} - 30$  KV for (1) per cent of its rated life.

#### NOTE 4

The Root Mean Square Anode Current shall be computed as the square root of the product of the peak and the average current.

