

LANSDALE TUBE COMPANY

RADIO AND TELEVISION TUBES

LANSDALE, PENNSYLVANIA

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TYPE 6332

11 June 1953

Subminiature Cold Cathode Diode

APPLICATION

The 6332 is a twin electrode, inert gas-filled, cold-cathode, subminiature tube for use as a voltage regulator. Its fast breakdown time, good voltage regulation and long life result in particularly reliable operation in electronic computer applications.

MAXIMUM RATINGS - Absolute Value

Maximum Cathode Current:

Peak 6 Milliamperes, DC
Average 2 Milliamperes
Maximum average time 15 Seconds

Ambient temperature limits (-55°) to 60° Centigrade.

ELECTRICAL DATA

<u>TEST</u>	<u>NOTE</u>	<u>CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>
Starting voltage	1		E_z —	80 Volts DC
Tube voltage drop	1,2,3	$I_b = 0.5$ ma	E_{td} 50V	60 Volts
Regulation	2	$I_b = 0.2$ to 1.5 ma	Reg. —	5 Volts
Breakdown time	1,4	$E_b = 100V$	t —	50 Microseconds
Drop stability	5	$I_b = 1.5$ ma for 30 seconds	—	1 Volt
Instantaneous Current fluctuation	5	$I_b = 0.2$ ma	—	5%
Accelerated life test	6	$I_b = 4.0$ ma	t 100	— Hours
Accelerated life test and points		Starting voltage	E_z —	80 Volts
		Tube voltage drop	E_{td} —	63 Volts
		Regulation	Reg. —	5 Volts
		Breakdown time	t —	50 Microseconds
		Drop stability	—	1 Volt
		Instantaneous current fluctuation	—	5%

- NOTES:
1. Value of starting voltage, tube voltage drop and breakdown time given are measured with a minimum ambient light intensity of 25 foot lamberts.
 2. A fixed resistor is used and E_{bb} varied to give the desired current.
 3. It is intended that the reading should be taken as quickly as possible (maximum elapsed time 1 second) after the tube fires.
 4. Test to be conducted after holding for at least 24 hours. Pulse should have a minimum rise time of 5 microseconds and a duration of approx. 100 microseconds.
 5. Drop stability and instantaneous current fluctuation are measured during the regulation test.
 6. Accelerated life test cathode current is double the maximum average cathode current.

Subminiature Cold Cathode Diode

MECHANICAL DATA

Mounting position.	o o o o o o o o o o o o o o o o	Any
Envelope	o o o o o o o o o o o o o o o o	T-2
Base	o o o o o o o o o o o o o o o o	Flat press,
		.018" Tinned flexible leads.

OUTLINE

