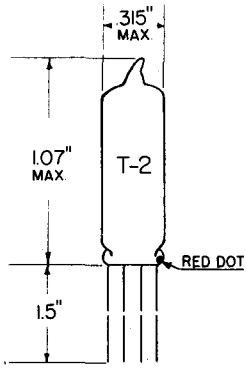
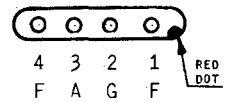
TUNG-SOL

THYRATRON

SELF INDICATING*



GLASS BULB



BOTTOM VIEW

0.016" TINNED
FLEXIBLE LEADS

0.048" CENTER TO CENTER

THE 7323 IS A SUBMINIATURE THYRATRON WITH NEGATIVE CONTROL GRID CHARACTERISTICS. THE GASEOUS GLOW IT EXHIBITS WHILE CONDUCTING IS SEVERAL TIMES BRIGHTER THAN AN NE-2 GLOW LAMP (BOTH DEVICES AT MAXIMUM RATINGS) AND MAKES THE USE OF AUXILIARY READOUT DEVICES UNNECESSARY. IT MAY BE VIEWED EITHER "END ON" OR FROM THE SIDE.

BECAUSE OF ITS SMALL SIZE, LOW OPERATING VOLTAGES, MINUTE TRIGGERING REQUIREMENTS AND LOW FILAMENT POWER, THE 7323 IS PARTICULARLY SUITED FOR USE IN TRANSISTOR CIRCUITS. THE TERMINAL LEADS MAY BE SOLDERED DIRECTLY INTO A CIRCUIT OR MAY BE CLIPPED FOR INSERTION IN AN IN-LINE SUBMINIATURE SOCKET.

THE 7323 REPLACES TYPE CK1050 IN ALL APPLICATIONS.

ELECTRICAL DATA

FILAMENT VOLTAGE	1.25±10%	VAC
FILAMENT CURRENT	280.	MA.
ANODE VOLTAGE DROP @ 3 MA.	18	VDC

MECHANICAL DATA

MOUNTING POSITION	ANY	
BULB	T-2	
DIAMETER (MAX.)	0.315	INCHES
LENGTH (WITHOUT LEADS) (MAX.)	1.07	INCHES
CONNECTIONS	FLEXIBLE LEADS	
WEIGHT (APPROX.)	0.06	OUNCES

CONTINUED ON FOLLOWING PAGE

* INDICATES AN ADDITION.

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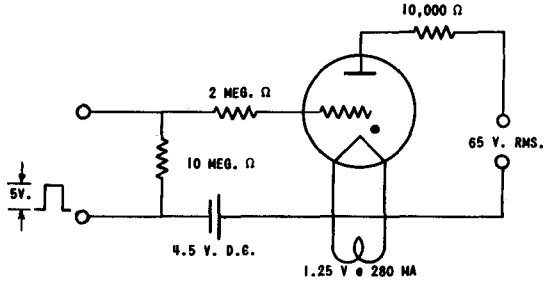
RATINGS
ABSOLUTE VALUES

ANODE SUPPLY VOLTAGE (RMS) (MAX.)	80	VAC
CATHODE CURRENT (MAX.)	3	MADC
PRECONDUCTION GRID (TRANSFER) CURRENT @ E_b = 75 VOLTS RMS (MAX.)	0.5	μADC

TYPICAL OPERATING CONDITIONS

ANODE SUPPLY VOLTAGE (RMS)	65	VAC
ANODE CIRCUIT RESISTANCE	10,000	OHMS
ANODE CURRENT	2	MADC
GRID BIAS VOLTAGE	-4.5	VDC
GRID SERIES RESISTANCE	2	MEGOHMS



PULSE OPERATED RELAY

APPLICATION NOTES

IT IS OFTEN NECESSARY TO PROVIDE A RELAY DEVICE TO OPERATE AT LOW LEVEL, LOW VOLTAGE, SHORT DURATION PULSES SUCH AS ARE FOUND IN TRANSISTOR CIRCUITS. THE 7323 SELF INDICATING THYRATRON PERFORMS THIS FUNCTION AS WELL AS PROVIDING AN ADEQUATE, VISUAL READOUT INDICATOR. ALTHOUGH NOT AS BRILLIANT AN INDICATOR AS COMPARABLE COLD CATHODE THYRATRONS, THE 7323 OPERATING AT 3 MILLIAMPERES IS MANY TIMES BRIGHTER THAN AN NE-2 NEON GLOW LAMP. THE EFFICIENT FILAMENT CONSUMES ONLY ABOUT ONE THIRD WATT OF HEATER POWER.

AS WITH ANY GAS TUBE, ONCE THE TUBE CONDUCTS, THE TUBE VOLTAGE DROP REMAINS VIRTUALLY CONSTANT AND THE CURRENT THROUGH THE TUBE IS LIMITED BY THE CIRCUIT RESISTANCE. THE GRID CIRCUIT SHOULD CONTAIN A 1,000 OHM SERIES RESISTANCE IF THE SOURCE RESISTANCE IS LOWER THAN THIS FIGURE.

THE 7323 IS NORMALLY MOUNTED BEHIND A PANEL CUT OUT FOR EITHER END-ON OR SIDE VIEWING. A SUBMINIATURE HEAT DISSIPATING TYPE OF TUBE CLAMP PROVIDES BOTH A CONVENIENT MEANS OF MOUNTING AS WELL AS SHIELDING TO MINIMIZE THE THE EFFECT OF HAND CAPACITY OR ELECTRICAL FIELDS.

THE 7323 CAN BE OPERATED FROM EITHER AN A.C. OR D.C. ANODE SUPPLY VOLTAGE. IF DC OPERATED, IT IS NECESSARY TO BREAK THE ANODE CIRCUIT (EITHER BY A MECHANICAL SWITCH OR NEGATIVE PULSE) TO RESTORE CONTROL AFTER THE TUBE HAS FIRED. THIS IS PARTICULARLY ADVANTAGEOUS IN THE "HOLD UNTIL RESET" TYPE OF APPLICATION.

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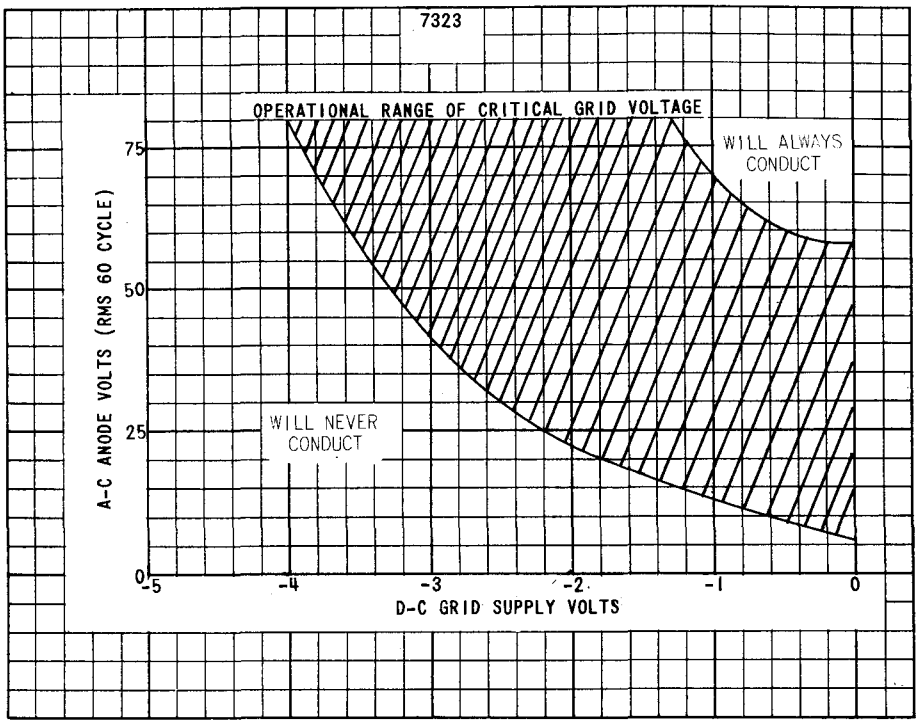

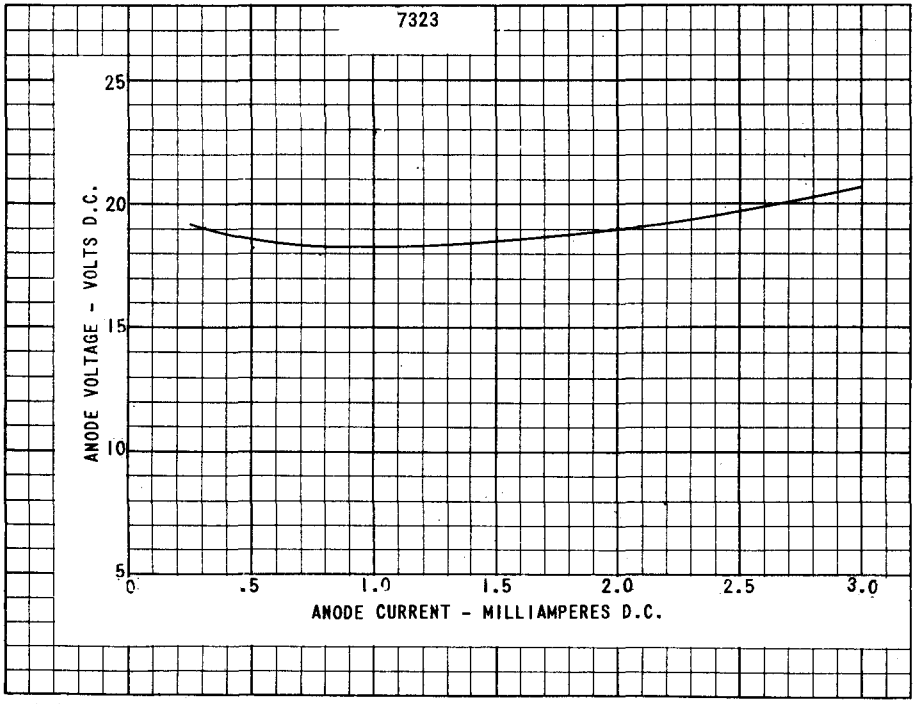

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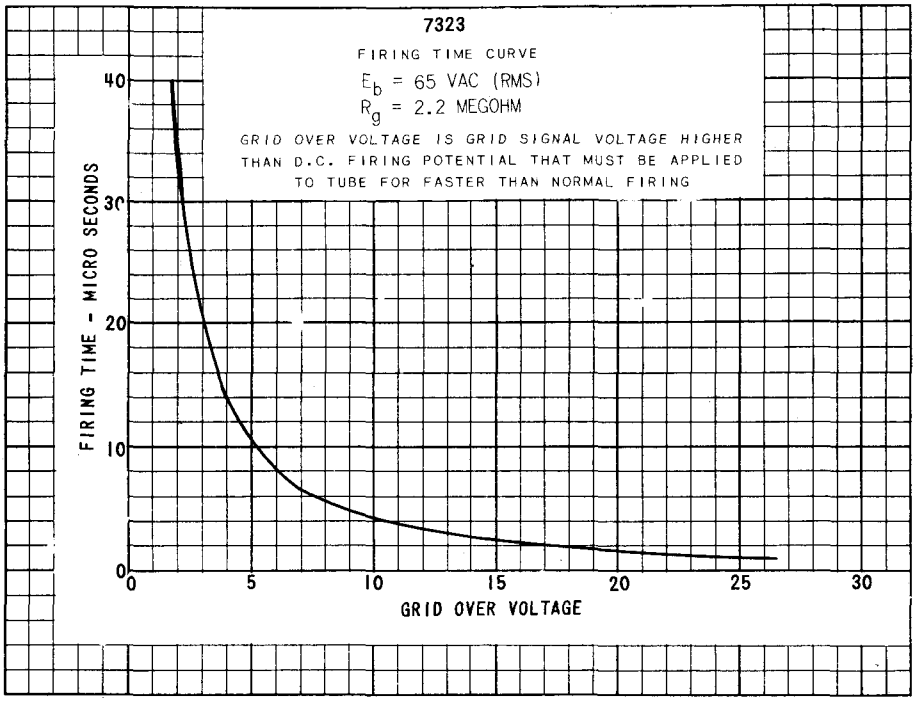
7323
FIRING TIME CURVE
E_b = 65 VAC (RMS)
R_g = 2.2 MEGOHM
GRID OVER VOLTAGE IS GRID SIGNAL VOLTAGE HIGHER THAN D.C. FIRING POTENTIAL THAT MUST BE APPLIED TO TUBE FOR FASTER THAN NORMAL FIRING
FIRING TIME - MICRO SECONDS
40
30
20
10
0
0
5
10
15
20
25
30
GRID OVER VOLTAGE