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TWIN DIODE

7-PIN MINIATURE TYPE

*For switching applications in electronic computers***GENERAL DATA****Electrical:**

Heater, Pure Tungsten, for Unipotential Cathodes:

Voltage.	6.3	ac or dc volts
Current.	0.2	amp

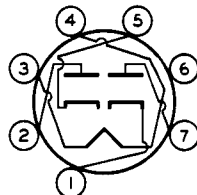
Direct Interelectrode Capacitances (Each unit, approx.):^o

Plate to cathode	1.4	μf
Plate to cathode, internal shield, and heater	2.2	μf
Cathode to plate, internal shield, and heater	3.5	μf
Heater to cathode.	2.1	μf

Mechanical:

Mounting Position.	Any
Maximum Overall Length	1-5/8"
Maximum Seated Length.	1-3/8"
Length, Base Seat to Bulb Top (Excluding tip).	1" ± 3/32"
Maximum Diameter	3/4"
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JETEC No.E7-1)
Basing Designation for BOTTOM VIEW	.6BT

Pin 1 - Cathode of Unit No.1
 Pin 2 - Plate of Unit No.2
 Pin 3 - Heater
 Pin 4 - Heater



Pin 5 - Cathode of Unit No.2
 Pin 6 - Internal Shield
 Pin 7 - Plate of Unit No.1

SWITCHING SERVICE*Values are for Each Unit***Maximum Ratings, Absolute Values:**

PEAK INVERSE PLATE VOLTAGE	360 max.	volts
PEAK PLATE CURRENT [■]	30 max.	ma
DC PLATE CURRENT	10 max.	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	150 max.	volts
Heater positive with respect to cathode.	150 max.	volts
BULB TEMPERATURE (At hottest point on bulb surface).	120 max.	°C

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

	Note	Min.	Max.	
Heater Current	1	180	220	ma

Note 1: With 6.3 volts ac or dc on heater.

^o Without external shield.[■]: See next page.



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Note Min. Max.

Direct Interelectrode Capacitance

(Each unit):

Plate to cathode. 2 - 2 μf

Plate Current (Each unit) 1,3 3 9 ma

Heater-Cathode Leakage Current

(Each unit):

Heater negative with respect
to cathode. 1,4 - 20 μa Heater positive with respect
to cathode. 1,4 - 20 μa

Leakage Resistance between plate

and all other electrodes

tied together (Each

unit) 1,5 100 - megohms

Note 1: With 6.3 volts ac or dc on heater.

Note 2: Without external shield and with electrodes of unit not under test connected to ground.

Note 3: With dc plate volts = 1.2. Electrodes of unit not under test connected to ground.

Note 4: With 150 volts dc between heater and cathode.

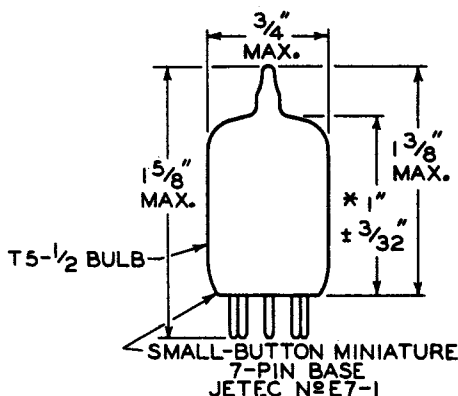
Note 5: With plate 300 volts negative with respect to all other electrodes tied together.

SPECIAL RATINGS & PERFORMANCE DATA

Heater-Cycling Life Performance:

Cycles of Intermittent Operation. . . . 2000 min. cycles

Under the following conditions: heater volts = 7.5 cycled one minute on and four minutes off, heater 180 positive with respect to cathode, and plate volts = 0.



Under the following conditions: rectangular pulse; pulse duration, 10 microseconds; pulse-repetition rate, 1000 pps; duty factor, 0.01 $\pm$ 0.1 per cent; rise time, less than 1 microsecond; fall time, less than 2 microseconds; overshoot, less than 5 per cent; and droop, less than 10 per cent.

* Measured from base seat to bulb-top line as determined by ring gauge of 7/16" I.D.



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AVERAGE PLATE CHARACTERISTIC
EACH UNIT

