7055

TWIN DIODE

7-PIN MINIATURE TYPE

For use in mobile communications equipment operating from 6-cell storage-battery systems. Useful as a detector in AM and FM receivers, as a full-wave rectifier in power supplies having low dc requirements, and in speech-clipper applications.

GENERAL DATA

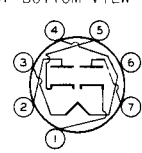
Electrical:

Heater, for Unipotential Cathodes:		
Voltage range	12 to 15	ac or dc volts
Current (Approx.) at 13.5 volts	0.155	amp
Direct Interelectrode Capacitances (Approx.):[o]		
Plate to cathode, internal shield, and heater (Each unit)	3.2	μμf
Cathode to plate, internal shield, and heater (Each unit)	3.6	μμf
Plate of unit No.1 to plate of unit No.2	0.026	μμf

Mechanical:

Operating Position	Any
Maximum Overall Length	1-3/4"
Maximum Seated Length	1-1/2"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/8" ± 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline	*See General Section*
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



RECTIFIER

Maximum Ratings, *Absolute Values:*

PEAK INVERSE PLATE VOLTAGE	350 max.	volts
PEAK PLATE CURRENT PER PLATE	60 max.	ma
DC OUTPUT CURRENT PER PLATE	10 max.	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	120 max.	volts
Heater positive with respect to cathode	120 max.	volts

Typical Operation:

The two units may be used separately or in parallel

Heater Voltage	13.5	volts

[o]: See next page.

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AC Plate Voltage per Plate (RMS)	117	volts
Minimum Total Effective Plate-Supply Impedance per Plate	300	ohms
DC Output Current per Plate	9	ma

[o] With external shield JETEC No.316 connected to cathode of unit under test.

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

	Note	Min.	Max.	
Heater Current	1	0.143	0.167	amp
Plate Current per Plate	1,2	15	-	ma
Heater-Cathode Leakage Current (Each unit):				
Heater negative with respect to cathode	1,3	-	5	μa
Heater positive with respect to cathode	1,3	-	5	μa
Leakage Resistance:				
Plate to all other electrodes of both units tied together	1,4	50	-	megohms

Note 1: With ac or dc heater volts = 13.5.

Note 2: With plate volts = 5 and electrodes of unit not under test connected to ground.

Note 3: With 100 volts dc between heater and cathode.

Note 4: With plate 300 volts negative with respect to all other electrodes of both units tied together.

SPECIAL RATINGS & PERFORMANCE DATA

Heater-Cycling Life Performance:

This test is performed on a sample lot of tubes from each production run. A minimum of 2000 cycles of intermittent operation is applied under the following conditions: heater volts = 17 cycled one-minute on and four minutes off, heater 135 volts negative with respect to cathode, and all other elements connected to ground. At the end of this test, tubes are checked for heater-cathode shorts and open circuits.

500-Hour Intermittent Life Performance:

This test is performed on a sample lot of tubes from each production run to insure high quality of the individual tube and to guard against epidemic failures. Life testing is conducted under the following conditions: heater volts = 15 and maximum-rated plate current.

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

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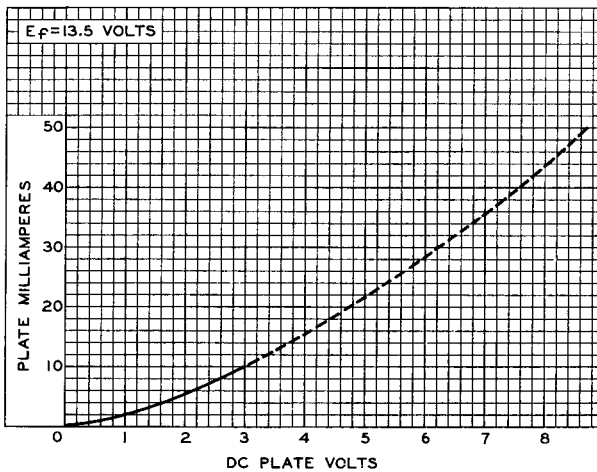
AVERAGE PLATE CHARACTERISTIC
EACH UNIT



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