

6AY11

Twin Diode—High-Mu-Twin Triode

DUODECAR TYPE

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC)	6.3 ± 0.6 volts
Current at heater volts = 6.3	0.690 amp
Peak heater-cathode voltage (Each unit):	
Heater negative with respect to cathode.	200 max. volts
Heater positive with respect to cathode.	200 ^a max. volts

Direct Interelectrode Capacitances:^b

Each Diode Unit:

P _D to (K _D ,H)	2.0	pf
K _D to (P _D ,H)	5.5	pf

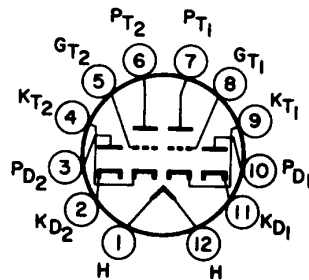
Each Triode Unit:

Grid to plate	2.2	pf
Input: G _T to (K _T ,H)	2.0	pf
Output: P _T to (K _T ,H)	0.22	pf
G _T to P _D	0.08 max.	pf
G _{T1} to G _{T2}	0.01 max.	pf
P _{T1} to P _{T2}	0.48	pf

Mechanical:

Operating Position	Any
Type of Cathodes	Coated Unipotential
Maximum Overall Length	1.875"
Seated Length	1.250" to 1.500"
Diameter	1.062" to 1.188"
Dimensional Outline	See <i>General Section</i>
Bulb	T9
Base	Small-Button Duodecar 12-Pin (JEDEC No. E12-70)
Basing Designation for BOTTOM VIEW	12DA

- Pin 1 - Heater
- Pin 2 - Cathode of Diode Unit No.2
- Pin 3 - Plate of Diode Unit No.2
- Pin 4 - Cathode of Triode Unit No.2
- Pin 5 - Grid of Triode Unit No.2
- Pin 6 - Plate of Triode Unit No.2
- Pin 7 - Plate of Triode Unit No.1
- Pin 8 - Grid of Triode Unit No.1
- Pin 9 - Cathode of Triode Unit No.1
- Pin 10 - Plate of Diode Unit No.1
- Pin 11 - Cathode of Diode Unit No.1
- Pin 12 - Heater



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Characteristics, Class A₁ Amplifier (Each Triode Unit):

Plate Voltage.	250	volts
Grid Voltage	-2.0	volts
Amplification Factor	100	
Plate Resistance (Approx.)	52700	ohms
Transconductance	1900	μmhos
Plate Current.	1.2	ma

TRIODE UNITS — AMPLIFIER — Class A₁

Values are for Each Unit

Maximum Ratings, Design-Maximum Values:

Plate Voltage.	330	volts
DC Grid Voltage:		
Negative	50	volts
Positive	0	volts
Plate Dissipation.	1	watt

DIODE UNITS — Two

Values are for Each Unit

Maximum Ratings, Design-Maximum Values:

Plate Current.	5 max.	ma
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Characteristics, Instantaneous Value:

Plate Current for plate volts = 5.	18	ma
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^a The dc component must not exceed 100 volts.
^b without external shield.

