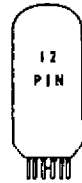


(TENTATIVE)

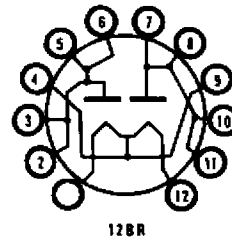
# engineering data for



BULLETIN E-424A  
5-61



## 5AZ3



CBS type 5AZ3 is a high-vacuum full-wave power rectifier which is designed for greater reliability and longer life. This tube employs a 12-pin button stem for better thermal efficiency. Internally generated heat flows easily through the double pins to the outside for radiation without the interference of undependable base-pin solder. In addition, the filament is center tapped for the d-c current connection so that the d-c component of filament current is equalized.

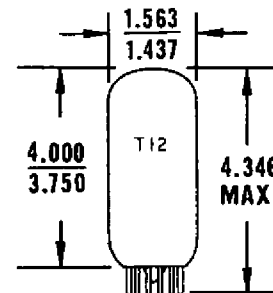
Electrically the 5AZ3 is identical to the 5U4GB and may be used for the same applications.

### MECHANICAL DATA

Cathode, coated filament	
Bulb	T-12
Overall height	4.346" max.
Seated height	4.000" max.
Base	E12-74
Basing	12 BR
Mounting position	Any
Outline	EIA12-62

### PIN CONNECTIONS

- Pin 1: Filament 2
- Pin 2: Plate 2 (I.C. to pins 3, 5 & 6)
- Pin 3: Plate 2 (I.C. to pins 2, 5 & 6)
- Pin 4: Filament center tap (I.C. to pin 9)
- Pin 5: Plate 2 (I.C. to pins 2, 3 & 6)
- Pin 6: Plate 2 (I.C. to pins 2, 3 & 5)
- Pin 7: Plate 1 (I.C. to pins 8, 10 & 11)
- Pin 8: Plate 1 (I.C. to pins 7, 10 & 11)
- Pin 9: Filament center tap (I.C. to pin 4)
- Pin 10: Plate 1 (I.C. to pins 7, 8 & 11)
- Pin 11: Plate 1 (I.C. to pins 7, 8 & 10)
- Pin 12: Filament 1



from JEDEC release #3230A, June 12, 1961

## ELECTRICAL DATA

### FILAMENT CHARACTERISTICS

Voltage, a-c or d-c	5.0 $\pm$ 10% volts
Current	3.0 amp

### MAXIMUM RATINGS (Design maximum values)

#### Rectifier Service †

Plate voltage, peak inverse	1700	volts
Plate supply voltage, rms (Rating Chart I)	600	volts
D-c output current (Rating Chart I)		
Steady-state peak plate current, each plate (Rating Chart II)	1.0	amp
Transient peak plate current, each plate (Rating Chart III)	5.0	amp

### AVERAGE CHARACTERISTICS

Tube conducting 225 ma (each plate)	44	volts
275 ma (each plate)	50	volts
300 ma (each plate)	54	volts

### TYPICAL OPERATION

#### Full-Wave Rectifier (Capacitor Input Filter)

Plate supply voltage, rms (each plate)‡	300	450	volts
Plate supply resistance (each plate)	21	67	ohms
Filter input capacitor	40	40	$\mu$ f
Output current, d-c	300	275	ma
Output voltage at filter input, d-c	290	460	volts

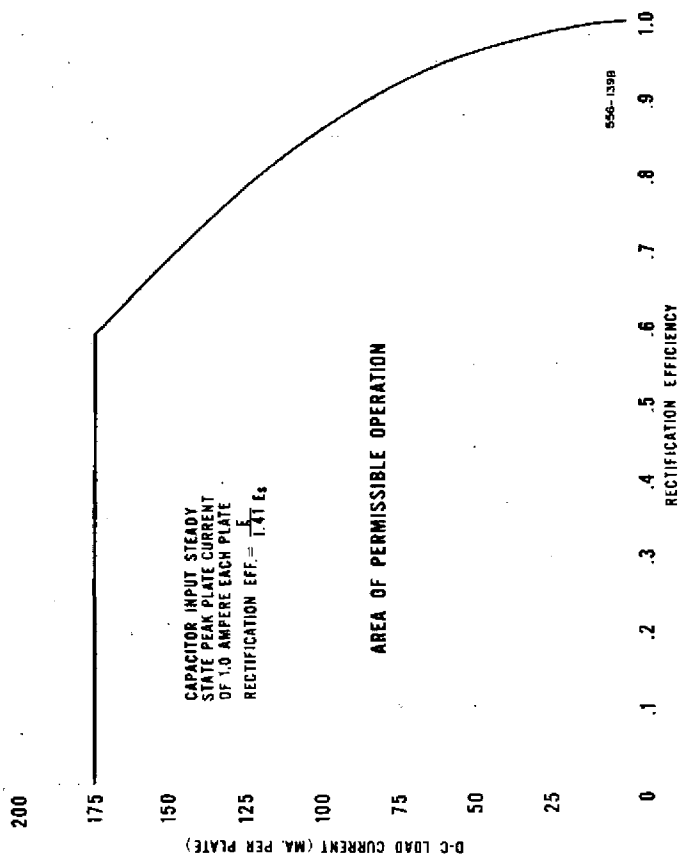
#### Full-Wave Rectifier (Choke Input Filter)

Plate supply voltage, rms (each plate)‡	550	volts
Filter input choke	10	henrys
Output current, d-c	275	ma
Output voltage at filter input, d-c	420	volts

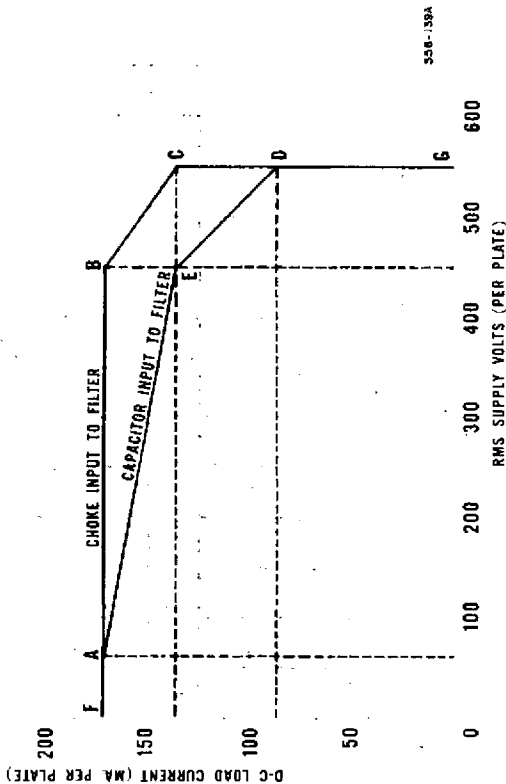
† For use with sinusoidal supply voltages within the frequency range of 25 to 1000 c.p.s.

‡ The indicated a-c supply voltage is measured without load.

# RATING CHART II



# RATING CHART I



# RATING CHART III

