



ELECTRONIC TUBE REFERENCE

7242

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

High-current triode for power electronic service. Available source material does not establish a narrower application confidently.

GENERAL CHARACTERISTICS

BASE DESIGNATION	A7-17	BASE PINS	7
NOMINAL HEATER	6.3 V / 7.5 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	82 Ω
TRANSCONDUCTANCE	0.111 S
AMPLIFICATION FACTOR	9
MAXIMUM PLATE VOLTAGE	400 V
MAXIMUM PLATE DISSIPATION	100 W
MAXIMUM CATHODE CURRENT	900 mA
Representative row for three identical cathode-controlled power sections.	

High-current power triode intended for series-regulator service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 Mazda

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1960 MAZDA

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumContinuousPlateCurrent	900 mA	—
MaximumGridCurrent	0 mA	—
Maximum Positive Grid Voltage	0 V	—
Maximum Negative Grid Voltage	-300 V	—
Maximum Heater Cathode Voltage	300 V	—
MinimumWarmupTime	30 s	—
Maximum Bulb Temperature	300 degC	—
MaximumAltitudeWithoutPressurization	3 km	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1961 TUNG SOL

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MinimumCathodeHeatingTime	30 s	—
CurrentPerCathodeMaximum	200 mA	—
AltitudeForFullRatings	10000 ft	—
ExtendedAltitudeWithCooling	60000 ft	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
ShockRating	450 g	—
VibrationRating	2.5 g	—
Service	Series regulator / passing tube	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 4 of 4

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Total plate current maximum	900 mA	WholeTube
Current per cathode maximum	300 mA	WholeTube
Grid Current (Max.)	12 uA	PublishedTable

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum cathode heating time	30 s	WholeTube
Heater Voltage	-10 VOLTS	PublishedTable
Heater Current (E F= 6.3 V.)	0.5 AMP	PublishedTable
Plate Resistance	8 OHMS	PublishedTable
Total Plate Current Dc	9 AMP	PublishedTable
If Tube Voltage Drop Is To Be Swung More Than 6 Volts, This	6 VOLTS	PublishedTable
Current Per Cathode (0c)	3 MA	PublishedTable
Plate Voltage (Dc)	4 VOLTS	PublishedTable
Heater-Cathode Voltage (Dc)	300 VOLTS	PublishedTable
Grid Voltage	3 VOLTS	PublishedTable
Heater Voltage	6.9 VOLTS	PublishedTable

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Regulated Service Or With Fixed Bias	0 OHMS	PublishedTable
Cathode Bias Only	0 OHMS	PublishedTable
Be 27 Ohms Or That Resistance Necessary To Pro	27 OHMS	PublishedTable
Plate Current	390 MA	PublishedTable
Transconductance (Min.)	0 uMHO	PublishedTable
Total Plate Current	690 MA	PublishedTable
Transconductance	0 uMHOS	PublishedTable
Heater Current Per Tube	7.88 AMP	PublishedTable



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 Mazda Belvu

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1968 MAZDA BELVU

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	6.3 V	Published nominal value
Heater or filament current	7.5 A	Published nominal value
Transconductance	111000 μS	Published nominal characteristic
Warm-up time	30 s	Minimum cathode heating time
Nominal anode current	420–690 mA	At 100 V anode and -4 V grid

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	100 W	Published limit

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

