



ELECTRONIC TUBE REFERENCE

7099

Voltage Regulator electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

VOLTAGEREGULATOR

Low-current inert-gas cold-cathode regulator providing approximately 155 V stabilization at only about 75-300 μ A.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Voltage Regulator	
REGULATOR VOLTAGE	155 V
MINIMUM REGULATOR CURRENT	0.075 mA
MAXIMUM REGULATOR CURRENT	0.3 mA
STARTING VOLTAGE	180 V
MAINTAINING VOLTAGE	155 V
Published ratings and characteristics promoted from approved datasheet.	

THE 7099 IS A LOW CURRENT, TWO ELEMENT, INERT-GAS-FILLED, COLD CATHODE,

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 · Voltage Regulator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode breakdown voltage bogey	180 V	—
Tube voltage drop at 0.075 mA bogey	155 V	—
Tube voltage drop at 0.3 mA bogey	156.5 V	—
Tube voltage drop at 0.3 mA maximum	162 V	—
Regulation 0.075 to 0.150 mA bogey	0.4 V	—
Regulation 0.150 to 0.300 mA bogey	0.6 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode breakdown voltage maximum	200 V	—
Maximum bulb temperature	100 C	—
Minimum ambient temperature	-55 C	—
Maximum altitude	60000 ft	—
Shunt capacitor maximum	0.1 uF	—

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 · Voltage Regulator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Regulator voltage	155 V	Promoted published value
Regulator minimum current	0.075 mA	Promoted published value
Regulator maximum current	0.3 mA	Promoted published value
Regulator maintaining voltage	155 V	Promoted published value
APPROXIMATELY	0.3 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAXIMUM DC CATHODE CURRENT	0.3 mA	RATINGS
MINIMUM OC CATHODE CURRENT	0.075 mA	RATINGS
BULB TEMPERATURE (MAX.)	100 mA	RATINGS
AMBIENT TEMPERATURE (MIN.) –	55 C	RATINGS
ALTITUDE (MAX.) 60 000 FEET	60 mA	RATINGS
OC ANODE SUPPLY VOLTAGE 225A ---- --- VOLTS	225 V	RATINGS
ANODE BREAKDOWN VOLTAGE --- 1\$0 Z00 VOLTS	1 V	RATINGS
TUBE VOLTAGE DROP AT	155 V	RATINGS
TUBE VOLTAGE DROP AT	162 V	RATINGS
REGULATION – 0.075 THROUGH	2.5 V	RATINGS
REGULATION – 0.i50 THROUGH	4 V	RATINGS
LEAKAGE CURRENT AT –	2 V	RATINGS
IS A MAXIMUM E BB MAX.1; WHEN THE LOAD CURRENT IS A MINIMUM (IL MIN.);	1 mA	RATINGS.
RECOMMENDED UNLESS A.RESISTANCE OF APPROXIMATELY	100 mA	RATINGS.