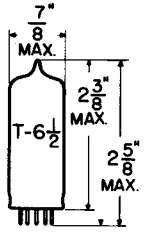
TUNG-SOL

TRIODE

MINIATURE TYPE



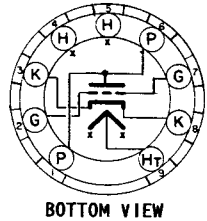
GLASS BULB

UNIPOTENTIAL CATHODE

HEATER

PARALLEL	SERIES
6.3±0.3 VOLTS	12.6±0.6 VOLTS
.45 AMP.	.225 AMP.

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON
9 PIN BASE

9MX

THE 7719 IS A SINGLE INDIRECTLY HEATED HIGH PERVEANCE TRIODE INTENDED FOR COMPUTER APPLICATIONS. THE CATHODE MATERIAL IS CHOSEN TO MINIMIZE THE DEVELOPMENT OF INTERFACE IMPEDANCE.

DIRECT INTERELECTRODE CAPACITANCES – APPROX.

WITHOUT EXTERNAL SHIELD

INPUT	6.5	μμf
OUTPUT	1.0	μμf
GRID TO PLATE	5.5	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM[A]

HEATER VOLTAGE (SERIES)	12.6±0.6	VOLTS
HEATER VOLTAGE (PARALLEL)	6.3±0.3	VOLTS
MAXIMUM PLATE VOLTAGE	330	VOLTS
MAXIMUM PLATE DISSIPATION	6.0	WATTS
MAXIMUM DC CATHODE CURRENT	40	MA.
MAXIMUM HEATER–CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE		
TOTAL DC AND PEAK	200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE		
DC	100	VOLTS
TOTAL DC AND PEAK	200	VOLTS
MAXIMUM BULB TEMPERATURE	175	°C

AVERAGE CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	6.3±0.3	12.6±0.6	VOLTS
HEATER CURRENT	.45[B]	.225[C]	AMP.
PLATE VOLTAGE	300		VOLTS
GRID VOLTAGE	-10.5		VOLTS
PLATE CURRENT	4		MA.
AMPLIFICATION FACTOR	25		
TRANSCONDUCTANCE	3500		μMHOS
PLATE RESISTANCE	7100		OHMS
GRID VOLTAGE FOR PLATE CURRENT OF 50μA(APPROX.)	-15		VOLTS

CONTINUED ON FOLLOWING PAGE

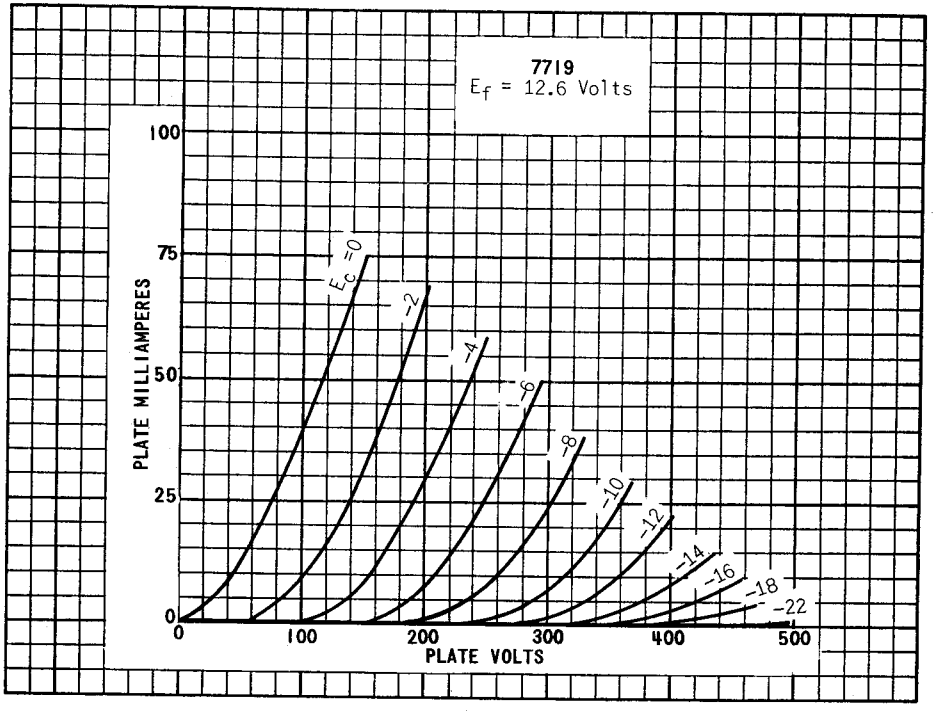
TUNG-SOL

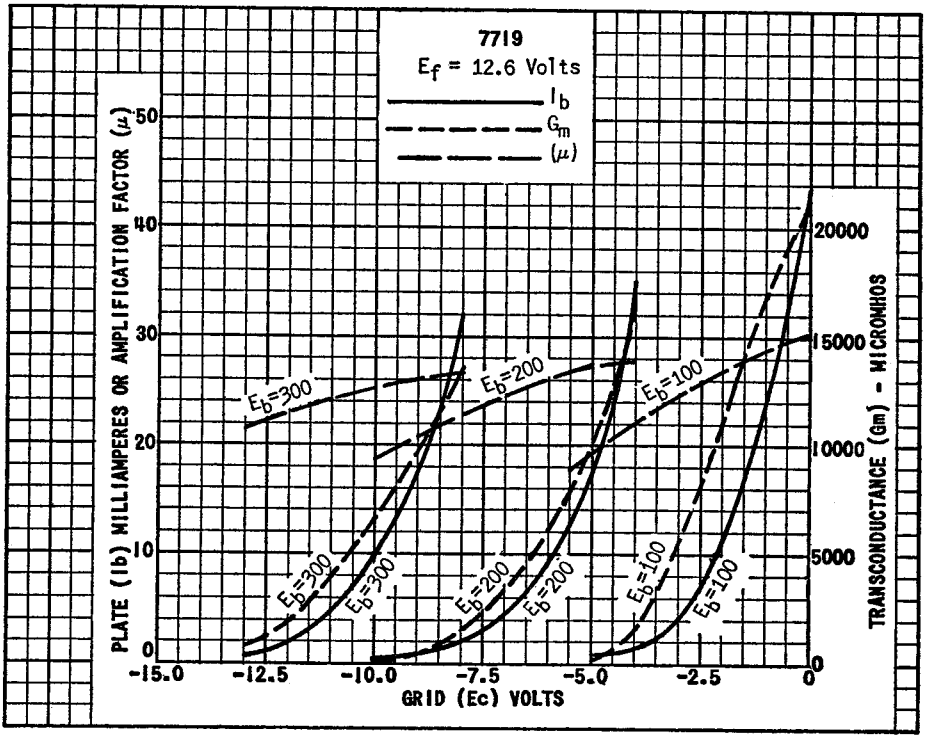
CONTINUED FROM PRECEDING PAGE

[A] DESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

[B] MEASURED AT 6.3 VOLTS.

[C] MEASURED AT 12.6 VOLTS.




7719
Ef = 12.6 Volts
Ib
Gm
(μ)
PLATE (Ib) MILLIAMPERES OR AMPLIFICATION FACTOR (μ)
TRANSCONDUCTANCE (Gm) - MICROMHOS
GRID (Ec) VOLTS
Eb=300
Eb=200
Eb=100
0
10
20
30
40
50
5000
10000
15000
20000
-15.0
-12.5
-10.0
-7.5
-5.0
-2.5
0