



ELECTRONIC TUBE REFERENCE

GM3A

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Russian power triode for low-frequency low-distortion cathode-coupled amplifier service in electronic or RF equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / —	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
MAXIMUM PLATE VOLTAGE	3000 V
<i>Promoted-field audit performed from English ratings/characteristics; detailed electrical values retained in parameter table.</i>	

The GM-3A triode is used in low-frequency low-distortion cathode-coupled amplifier circuits in electronic equipment, with water-cooled anode and air-cooled stem.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 Electronintorg

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

1968 ELECTRONINTORG

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
frequency no-distor	3 Hz	The 'M-3A triode is used in low-frequency no-distor-
Cathode: directly heated, carbonized thoriated tungsten [1]	1	Cathode: directly heated, carbonized thoriated tungsten. 1, 3- kavoa; 2, 4 — ceTka;
Cathode: directly heated, carbonized thoriated tungsten [2]	3	Cathode: directly heated, carbonized thoriated tungsten. 1, 3- kavoa; 2, 4 — ceTka;
Cathode: directly heated, carbonized thoriated tungsten [3]	2	Cathode: directly heated, carbonized thoriated tungsten. 1, 3- kavoa; 2, 4 — ceTka;
Cathode: directly heated, carbonized thoriated tungsten [4]	4	Cathode: directly heated, carbonized thoriated tungsten. 1, 3- kavoa; 2, 4 — ceTka;
grid [1]	1	Envelope: glass-to-metal. 1, 3 - cathode; 2, 4 - grid;
grid [2]	3	Envelope: glass-to-metal. 1, 3 - cathode; 2, 4 - grid;
grid [3]	2	Envelope: glass-to-metal. 1, 3 - cathode; 2, 4 - grid;
grid [4]	4	Envelope: glass-to-metal. 1, 3 - cathode; 2, 4 - grid;
temperature, °C L [1]	-10 C	TemnepaTypa okpyXxatouweit cpeab), °C -10—+55 Ambient temperature, °C L. -10to +55
temperature, °C L [2]	55 C	TemnepaTypa okpyXxatouweit cpeab), °C -10—+55 Ambient temperature, °C L. -10to +55

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
temperature, °C L [3]	-10 °C	Temnepatypa okpyXxatouweit cpeab), °C -10—+55 Ambient temperature, °C L. -10to +55
temperature, °C L [4]	55 °C	Temnepatypa okpyXxatouweit cpeab), °C -10—+55 Ambient temperature, °C L. -10to +55
Mutual conductance, mA/NV L L L L L [1]	17 uS	KpyTtuana xapakrepuctuku, MA/B L . 17-27 Mutual conductance, mA/NV L L L L L. 17-27
Mutual conductance, mA/NV L L L L L [2]	-27 uS	KpyTtuana xapakrepuctuku, MA/B L . 17-27 Mutual conductance, mA/NV L L L L L. 17-27
Mutual conductance, mA/NV L L L L L [3]	17 uS	KpyTtuana xapakrepuctuku, MA/B L . 17-27 Mutual conductance, mA/NV L L L L L. 17-27
Mutual conductance, mA/NV L L L L L [4]	-27 uS	KpyTtuana xapakrepuctuku, MA/B L . 17-27 Mutual conductance, mA/NV L L L L L. 17-27
Gain coefficient [1]	7	Koachduument yeunenms L L L. 7-11 Gain coefficient 7-11
Gain coefficient [2]	-11	Koachduument yeunenms L L L. 7-11 Gain coefficient 7-11
Gain coefficient [3]	7	Koachduument yeunenms L L L. 7-11 Gain coefficient 7-11
Gain coefficient [4]	-11	Koachduument yeunenms L L L. 7-11 Gain coefficient 7-11
voltage3kV [1]	6 kV	NpU HANPAXKEHWN aHOAA B UMNYNbCE at peak anode voltage3kV 6-10
voltage3kV [2]	-10 kV	NpU HANPAXKEHWN aHOAA B UMNYNbCE at peak anode voltage3kV 6-10
voltage [1]	6 kV	BkB 6-10 Cutoff voltage (at anode voltage 4.5 kV,
voltage [2]	-10 kV	BkB 6-10 Cutoff voltage (at anode voltage 4.5 kV,
voltage [3]	4.5 kV	BkB 6-10 Cutoff voltage (at anode voltage 4.5 kV,
current [1]	500 mA	Hanpsi»xeHue oTceku (npu HanpsxeHuu anode current 0.5 A}, V _{atmost} 600
current [2]	600 A	Hanpsi»xeHue oTceku (npu HanpsxeHuu anode current 0.5 A}, V _{atmost} 600

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode capacitance, pF [1]	45 pF	anopa 4,5 kB, Toke aHoga 0,5 A), B, Interelectrode capacitance, pF:
Interelectrode capacitance, pF [2]	5 pF	anopa 4,5 kB, Toke aHoga 0,5 A), B, Interelectrode capacitance, pF:
input,atmost	600	Hebonee 600 input,atmost
output,atmost [1]	6	MexanekTpoaHbie emkocTy, nd, He 6onee: output,atmost o 6
output,atmost [2]	6	MexanekTpoaHbie emkocTy, nd, He 6onee: output,atmost o 6
voltage. kV [1]	0 kV	Hanpsxenue avopa, kB 0. 6 Anode voltage. kV o 6
voltage. kV [2]	6 kV	Hanpsxenue avopa, kB 0. 6 Anode voltage. kV o 6
voltage. kV [3]	6 kV	Hanpsxenue avopa, kB 0. 6 Anode voltage. kV o 6
anode [1]	7510	AHOAOM . . « o o e 7,510° anode 7510°
anode [2]	7510	AHOAOM . . « o o e 7,510° anode 7510°
grid [1]	300	CETKOM o 300 grid . . . 300
grid [2]	300	CETKOM o 300 grid . . . 300
Temperature at envelope, stem and seals, °C [1]	60104 C	TemnepaTypa 060104KN, HOXKKW U cnaes, °C 150 Temperature at envelope, stem and seals, °C 150
Temperature at envelope, stem and seals, °C [2]	150 C	TemnepaTypa 060104KN, HOXKKW U cnaes, °C 150 Temperature at envelope, stem and seals, °C 150
Temperature at envelope, stem and seals, °C [3]	150 C	TemnepaTypa 060104KN, HOXKKW U cnaes, °C 150 Temperature at envelope, stem and seals, °C 150
Anode Characteristic Curves: U, =	6.3	Averaged Anode Characteristic Curves: U, =6.3V;
grid [1]	4	. /) — — — grid 4 A 4 &fi Z_
grid [2]	4	. /) — — — grid 4 A 4 &fi Z_