1865123

PRODUCT INFORMATION
Planar Triode

GE18651-X
GE18651-1
GE18651-2
GE18651-3
GE18651-AL

The GE18651 is a planar triode of ceramic and metal construction intended for use as a plate-pulsed oscillator or amplifier at frequencies up to 1200 megahertz. This tube was designed primarily for zero bias operation in long life broadbanded amplification chains. The GE18651 features a lengthened anode to permit circuit tuning along its length.

CHARACTERISTICS AND TYPICAL OPERATION

AVERAGE CHARACTERISTICS

	Minimum	Bogey	Maximum	Units	Test Conditions Ef V	Eb V	Ib Ma	Eg V	Rk Ohms	ip A
Heater Voltage, AC or DC*	6.0	6.3	6.6	Volts						
Heater Current	465	500	535	Milliamperes	6.3	—	—	—	—	
Plate Current	14	22	30	Milliamperes	6.3	200	—	—	100	
Amplification Factor	56	75	95		6.3	200	—	—	100	
Transconductance	20000	27000	34000	Micromhos	6.3	200	—	—	100	
Grid Voltage, Cutoff	—	-5	-9	Volts	6.3	200	0.1	—	—	
Pulse Emission	—	—	72	Volts	6.0	400	—	-30	—	3.0
Grid Drive : GE18651-1	5	—	14	Volts	6.0	400	—	-30	—	1.0
GE18651-2	8	—	14	Volts	6.0	400	—	-30	—	1.0
GE18651-3	6	—	9	Volts	6.0	400	—	-30	—	1.0
GE18651-AL	6	—	9	Volts	6.0	400	—	-30	—	1.0
Direct Interelectrode Capacitances •										
Grid to Plate: (g to p)	1.45	1.6	1.75	pf						
Input: g to (h+k)	5.1	5.9	6.7	pf						
Output: p to (h+k)	—	—	—	pf						
Cathode Heating Time	60	—	—	Seconds						

PLATE-PULSED OSCILLATOR SERVICE

Frequency	1200	Megahertz
Duty Factor	0.004	
Pulse Duration	4	Microseconds
Pulse Repetition Rate	1000	Pulses/Second
Peak Positive-Pulse Supply Voltage	1500	Volts
Plate Current: Average During Pulse	1.5	Amperes
Grid Current: Average During Pulse	0.4	Amperes
Power Output: Average During Pulse	800	Watts

NOTES

* The equipment designer should design the equipment so that heater voltage is centered at the specified bogey value, with heater supply variations restricterd to maintain heater voltage within the specified tolerance. In some applications, onger tube life may be obtained at reduced heater voltage. For specific recommendations, contact your MPD sales representative.

• Measured at 450 KHz using a grounded adapter that provides shielding between external terminals of tube.

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