



TYPE 6180

DATE 21.1.52
ISSUED

R.M.A. REGISTRATION DATA

6180TRUSTWORTHY DOUBLE TRIODE

The 6180 is a double triode designed for trustworthy operation under conditions of vibration and mechanical shock. The heaters of the two triode units are connected in series, so that failure of either heater renders both units inoperative. The electrical characteristics are similar to the 6SN7GT, but the maximum ratings have been reduced.

MECHANICAL DATA

Coated unipotential cathode.

Outline drawing	9-3	Bulb	T-9
Base	B.8.6		
Maximum diameter		1.9/32"	
Maximum overall length		2.7/8"	
Maximum seated height		2.5/16"	
Pin Connections		Basing Number 8ED	

Pin 1 - Grid of Triode 2	Pin 5 - Plate of Triode 1
Pin 2 - Plate of Triode 2	Pin 6 - Cathode of Triode 1
Pin 3 - Cathode of Triode 2	Pin 7 - Heater
Pin 4 - Grid of Triode 1	Pin 8 - Heater

Mounting position	any
Maximum shock (in intermittent service)	500 ζ
Vibration (continuous service)	2 $\frac{1}{2}$ g
Mechanical resonance	None below 100c/s

ELECTRICAL DATADirect inter-electrode capacitances.Triode 1

Grid to Plate	3.5 μuf
Grid to Cathode	2.3 μuf
Plate to Cathode	2.5 μuf

Sheet 1 of 2

Triode 2

Grid to plate	3.3 μuf
Grid to Cathode	2.6 μuf
Plate to Cathode	2.7 μuf
Plate to Plate	0.4 μuf

RATINGS

Heater voltage (ac or dc)	6.3 volts
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VALUES FOR EACH SECTION

Maximum heater-cathode voltage	90 volts
Maximum plate voltage	300 volts
Maximum negative grid voltage	100 volts
Maximum positive grid voltage	0 volt
Maximum plate dissipation	2.25 watts

Maximum grid circuit resistance	1.0 megohms
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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

Heater voltage	6.3 volts
Heater current	0.6 amp

VALUES FOR EACH SECTION

Plate voltage	100	250 volts
Grid voltage	0	-9 volts
Plate current	10.6	6.5 mA
Plate current for grid voltage of -24 volts		15mA Max.
Plate resistance	8000	9,100 ohms
Transconductance	2500	2,200 μmhos
Amplification factor	20	20