

RADIO VALVE COMPANY OF CANADA LIMITED

TORONTO, CANADA

Electronic Tube 6006 - Preliminary Technical Information

The 6006 is a metal, high frequency, semi-remote cutoff pentode, similar to the 6SG7. It is designed for dependable operation under conditions of shock and vibration usually found in aircraft and mobile applications.

TECHNICAL INFORMATION

GENERAL

Electrical Data

Cathode - Coated Unipotential

Heater Voltage (AC or DC)	6.3 volts
Heater Current	0.3 amp.

Mechanical Data

Envelope - Metal shell MT-8
Base - Small Wafer Octal 8-pin
Maximum Overall Length - 2 5/8"
Maximum Seated Height - 2 1/16"
Maximum Diameter - 1 5/16"
Mounting Position - Any

Direct Interelectrode Capacitances *

Grid to Plate	0.004 uuf Max.
Input	8.5 uuf
Output	7.0 uuf

* Shell connected to cathode.

Maximum and Minimum Ratings are Design Center Values

AMPLIFIER

Plate Voltage	300 max. volts
Screen Voltage	200 max. volts
Screen Supply Voltage	300 max. volts
Grid Voltage	0 min. volts
Plate Dissipation	3 max. watts
Screen Dissipation	0.6 max. watt
Maximum Vibration Output	250 RMS millivolts

This output is measured across a load resistor of 2,000 ohms as the tube is vibrated with a total sinusoidal motion of 0.08 inches at 25 cycles per second.

Conditions of Test:

Heater Voltage	6.3 volts
Plate Voltage	250 volts
Grid #1 Voltage	-1.0 volt
Grid #2 Voltage	125 volts
Shell Voltage	0 volts

Where the cathode is not directly connected to the heater, the heater-cathode potential should be kept as low as possible.

Typical Operation and Characteristics - Class A₁ Amplifier:

Plate Voltage	100	250	250	volts
Screen Voltage	100	125	150	volts
Grid Voltage	-1	-1	-2.5	volts
Suppressor	Connected to pin #3 internally			
Plate Resistance (Approx.)	0.25	0.9	#	megohm
Transconductance	4100	4700	4000	umhos
Grid Bias *	-11.5	-14	-17.5	volts
Plate Current	8.2	11.8	9.2	ma.
Screen Current	3.2	4.4	3.4	ma.

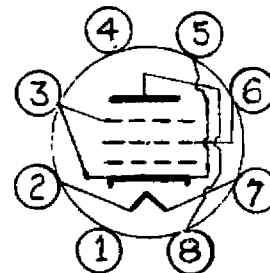
Greater than 1 megohm.

* Approximate, for transconductance of 40 micromhos.

BASE CONNECTIONS

Pin 1	Shell and Internal Shield
Pin 2	Heater
Pin 3	Cathode and Grid #3
Pin 4	Grid #1
Pin 5	Cathode
Pin 6	Grid #2
Pin 7	Heater
Pin 8	Plate

BASING DIAGRAM



BOTTOM VIEW
(8BK)

August 22, 1950