SYLVANIA

engineering data service

SYLVANIA
6AV5GA
6AV5GT
12AV5GA

MECHANICAL DATA

	6AV5GT	6AV5GA 12AV5GA
Bulb	T-9	T-11 or T-12
Base	B6-8 Intermediate Shell Octal, 6-Pin or B6-60 Short Intermediate Shell Octal 6-Pin	B6-112 Short Medium Shell Octal, 6-Pin or B6-120 Short Medium Shell Octal, 6-Pin
Outline	9-11 or 9-41	See Drawing
Basing	6CK	6CK
Cathode	Coated Unipotential	Coated Unipotential
Mounting Position	Any	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

	6AV5GA 6AV5GT	12AV5GA	
Heater Voltage	6.3	12.6	Volts
Heater Current	1.2	0.6	Amperes
Heater Warm-up Time[1]		11	Seconds
Heater-Cathode Voltage (Design Center Values)			
Heater Negative with Respect to Cathode			
Total D C and Peak	200	200	Volts Max.
Heater Positive with Respect to Cathode			
D C	100	100	Volts Max.
Total D C and Peak	200	200	Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate	0.5 μμf
Input	14 μμf
Output	7.0 μμf

RATINGS (Design Center Values—Except as Noted)

Horizontal Deflection Amplifier[2]

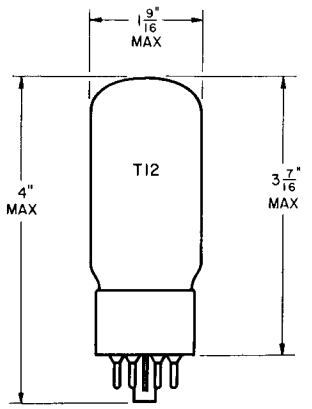
D C Plate Supply Voltage (Boost + D C Power Supply)	550	Volts	Max.
Peak Positive Plate Voltage (Abs. Max.)	5500	Volts	
Peak Negative Plate Voltage	1250	Volts	Max.
Plate Dissipation[3]	11	Watts	Max.
Peak Negative Grid No. 1 Voltage	300	Volts	Max.
D C Grid No. 2 Voltage	175	Volts	Max.
Grid No. 2 Dissipation	2.5	Watts	Max.
Average Cathode Current	110	Ma	Max.
Peak Cathode Current	400	Ma	Max.
Grid No. 1 Circuit Resistance	0.47	Megohm	Max.
Bulb Temperature (at Hottest Point)	210°	C	Max.

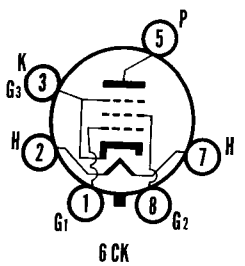
QUICK REFERENCE DATA

The Sylvania Types 6AV5GA, 6AV5GT and 12AV5GA are beam power pentodes designed primarily for use as horizontal deflection amplifiers in television receivers.

The 12AV5GA employs a 600 Ma heater and controlled heater warm-up time for service in series string television receivers.

The 6AV5GT is contained in a T-9 bulb while the 6AV5GA and 12AV5GA are T-11 or T-12 envelopes.





SYLVANIA ELECTRIC PRODUCTS INC.

RADIO TUBE DIVISION
EMPORIUM, PA.

Prepared and Released By The
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EMPORIUM, PENNSYLVANIA

MARCH 1956

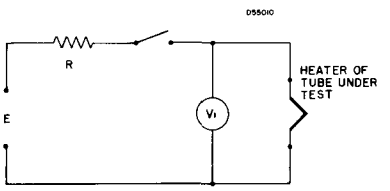
AVERAGE CHARACTERISTICS

Plate Voltage	60	250 Volts
Grid No. 2 Voltage	150	150 Volts
Grid No. 1 Voltage	0	−22.5 Volts
Plate Current	225[4]	55 Ma
Grid No. 2 Current	25[4]	2.1 Ma
Plate Resistance (approx.)		20000 Ohms
Transconductance		5500 μmhos
Grid No. 1 Voltage (approx.) for I_b = 1 Ma		−46 Volts
Triode Amplification Factor[5]		4.3

NOTES:

1. *Heater warm-up Time is defined as the time required in the circuit shown below for the voltage across the heater terminals to increase from zero to the heater test voltage (VI). The conditions used in conjunction with the test circuit depend upon the rated heater voltage and current of the tube under test.*

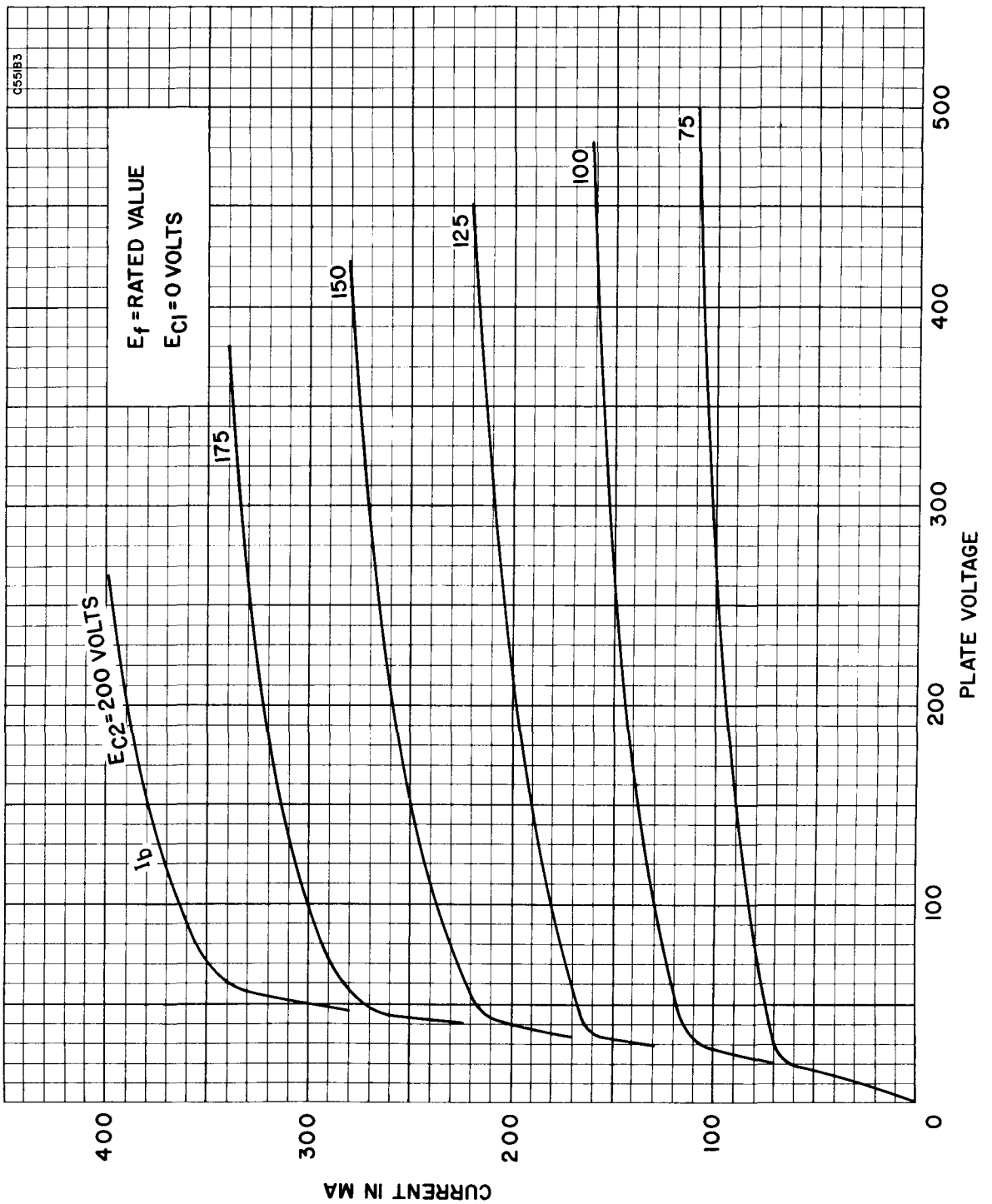
   For this Type: E = 50 Volts, R = 63 Ohms, VI = 10.0 Volts.



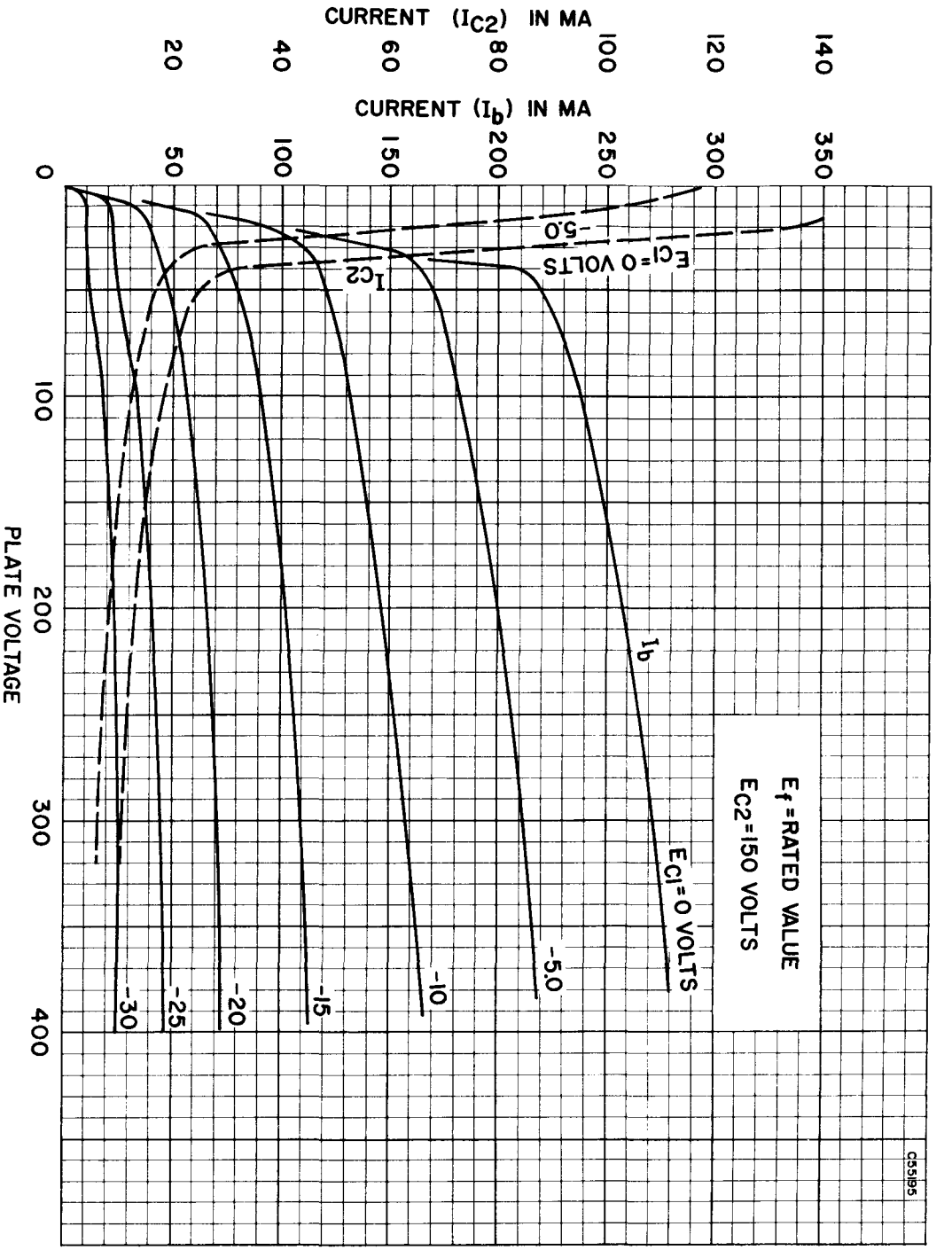
E — Applied Voltage, RMS or D C
R — Total Series Resistance
VI — Heater Test Voltage, RMS or D C
(80% Rated Heater Voltage)

2. *For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Commmunications Commission", the duty cycle of the voltage pulse must not exceed 15% of one scanning cycle.*
3. *In stages operating with grid leak bias, an adequate cathode bias resistor or other suitable means is required to protect the tube in the absence of excitation.*
4. *Instantaneous values.*
5. *Triode connection (screen tied to plate) with $E_b = E_{c2} = 150$ Volts and $E_{c1} = -22.5$ Volts.*

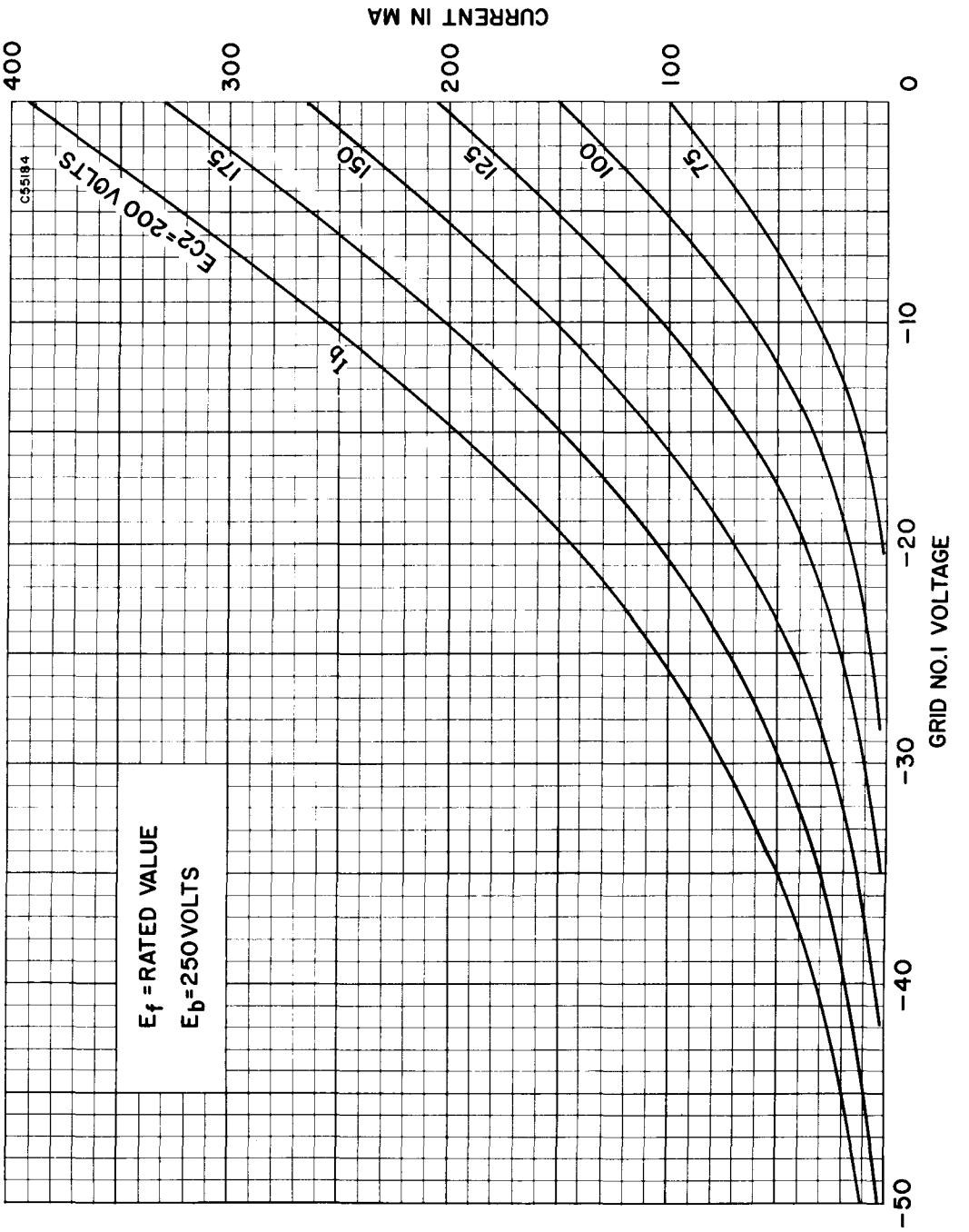
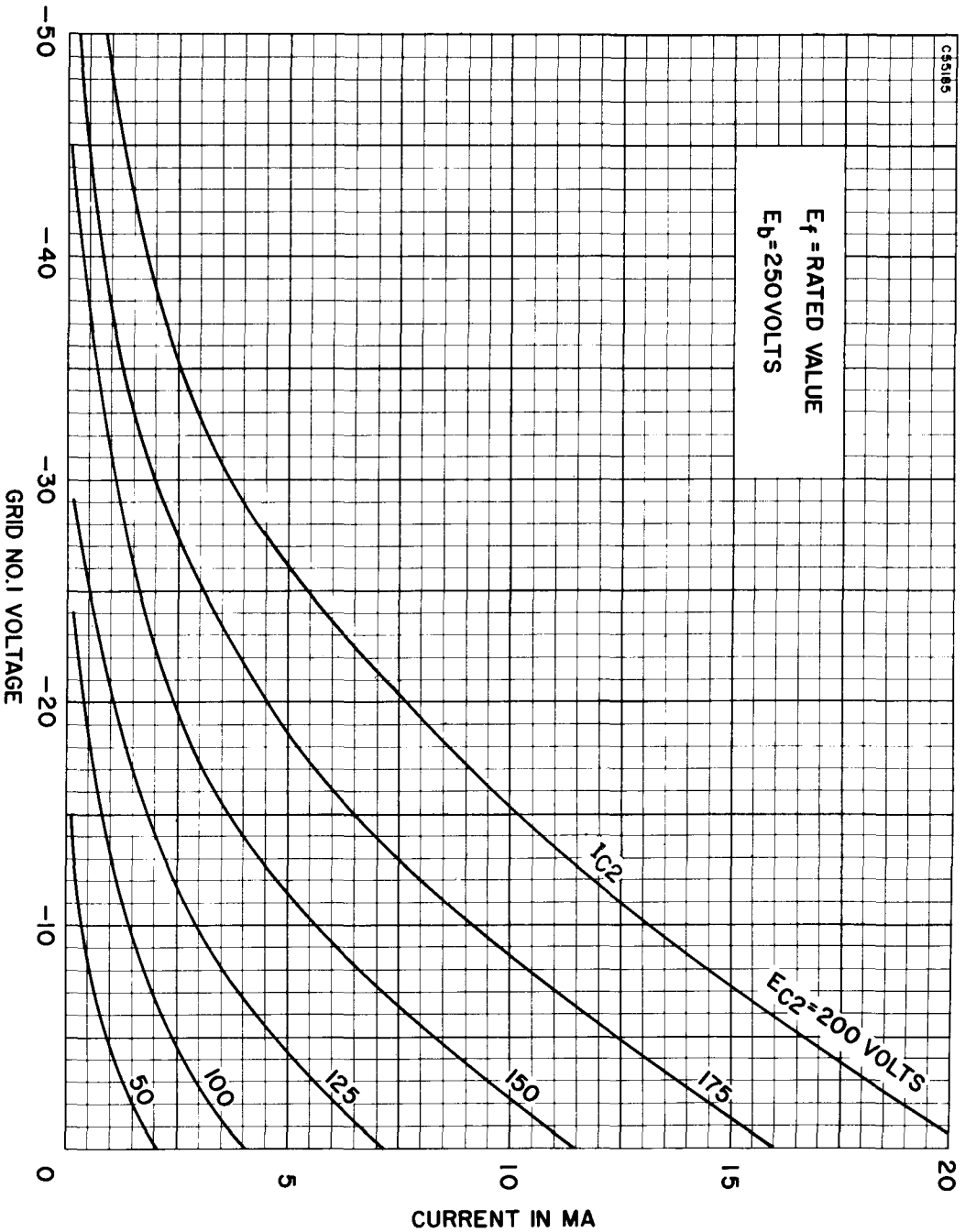
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS