

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Clock input low level pulse width		200			ns
Clock input high level pulse width		200			ns
Reset in low level				-8	V
Reset in high level		-2.5			V
K input level for 0% modulation index		VDD	VDD	VDD	V
K input level for 100% modulation index			-1.8		V
Clock Out low level	R load $\geq$ I M			-8	V
Clock Out high level		-I			V
Clock Out rise/fall	C load $\leq$ 30 pF			150	ns
Reset Out low level	R load $\geq$ I M			-9	V
Reset Out high level		-I			V
STB Out/Footage Out bias voltage (See Fig.C)		VDD-2	VDD	VDD+2	V
STB Out Current (See Fig.D)	STB Out at VDD STB in Voltage=VDD		I90		uA
Power Supply VDD		-II		-I6	V
Power Consumption	All outputs open Reset In = Low Sustain Bias=VSS			40	mA

NOTE: unused K inputs must be tied at Vss.

TMS36I5NS - RI107-RI103

ABSOLUTE MAXIMUM RATINGS

Supply Voltage VDD	VSS + .3V to VSS -20V
Input Voltage Range	VSS + .3V to VSS -20V
Storage Temperature	-55°C to +150°C
Total Power Dissipation at (or below) 25°C Free-Air Temperature	I W
Operating Free-Air temperature Range	0°C to 50°C

ELECTRICAL CHARACTERISTICS

At 25°C Free-Air Temperature VSS = 0V, VDD = -15V (Unless Otherwise Specified)

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
STBIN Input Current (See Fig.A)	VIN=VDD		30		uA
K Input Impedance (See Fig.B)	VK=VDD, Pin2 at VDD VK=VDD, Pin2 at VSS	30 30	45 1000	60	K Ω M Ω
Input leakage current (any input except K inputs and PIN22)	VIN=VDD All other Pins at VSS			I	uA
Clock input frequency		20		* 2200	KHz
Clock input rise/fall				150	ns
Clock input high		-I			V
Clock input low				-7	V

\* 4.4Mhz available upon request

TYPICAL CHARACTERISTICS

STB IN CURRENT  
 $V_s$   
 STB IN VOLTAGE

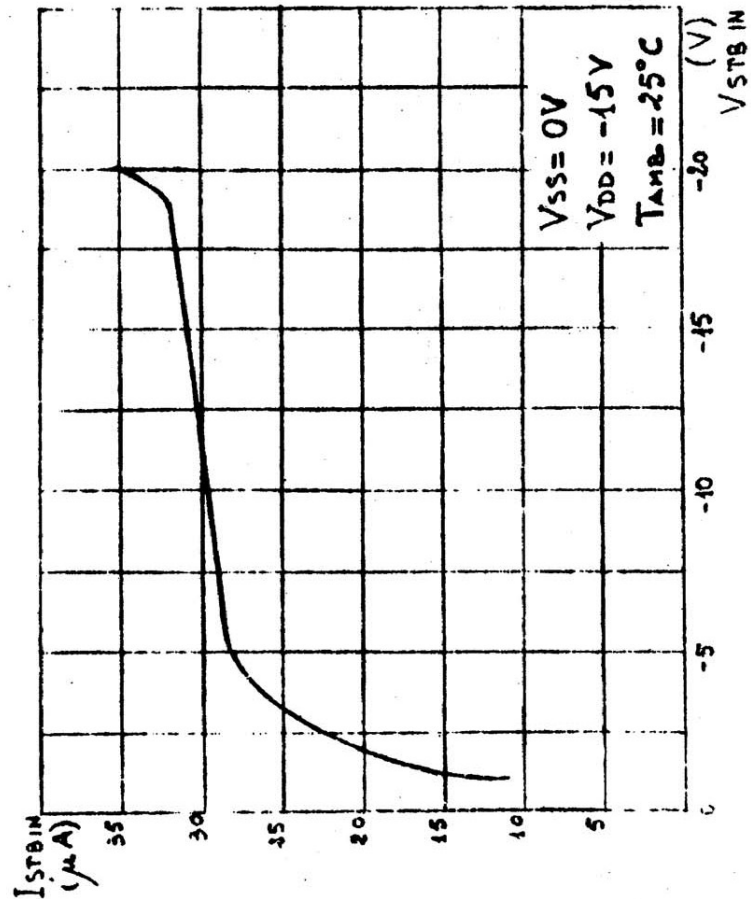


FIG. A

K INPUTS CURRENT  
 $V_s$   
 K INPUTS VOLTAGE

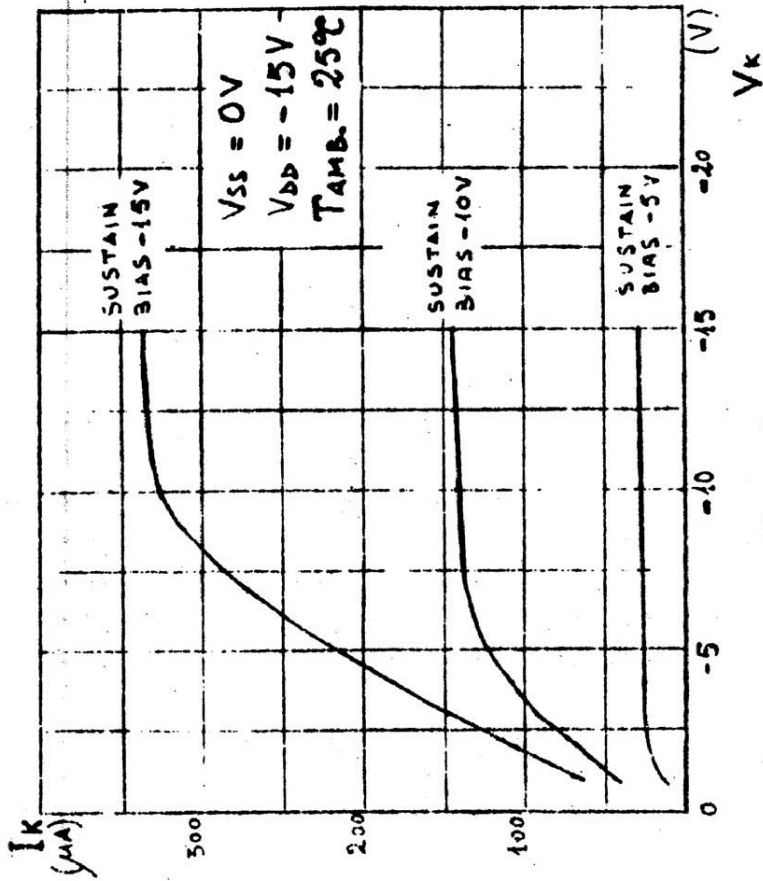


FIG. B

PIN 1 & PIN 24

NORMALIZED OUTPUT CURRENT  
 $V_s$   
OUTPUT VOLTAGE

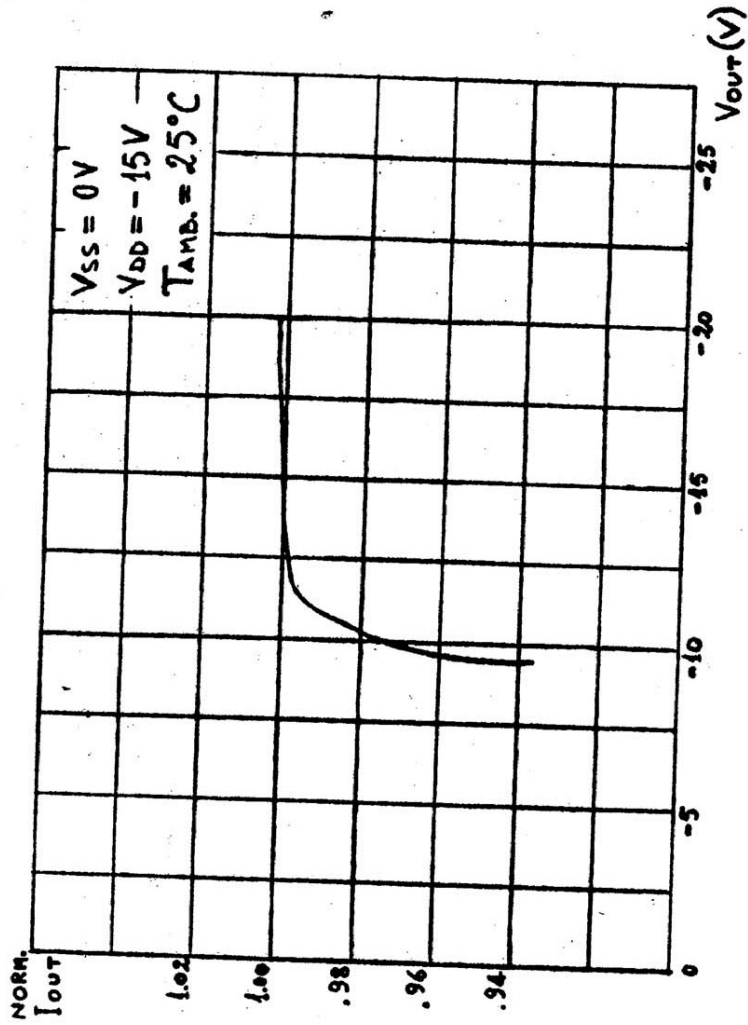


FIG. C

# TYPICAL CHARACTERISTICS

## STBOUT CURRENT VS STBIN VOLTAGE

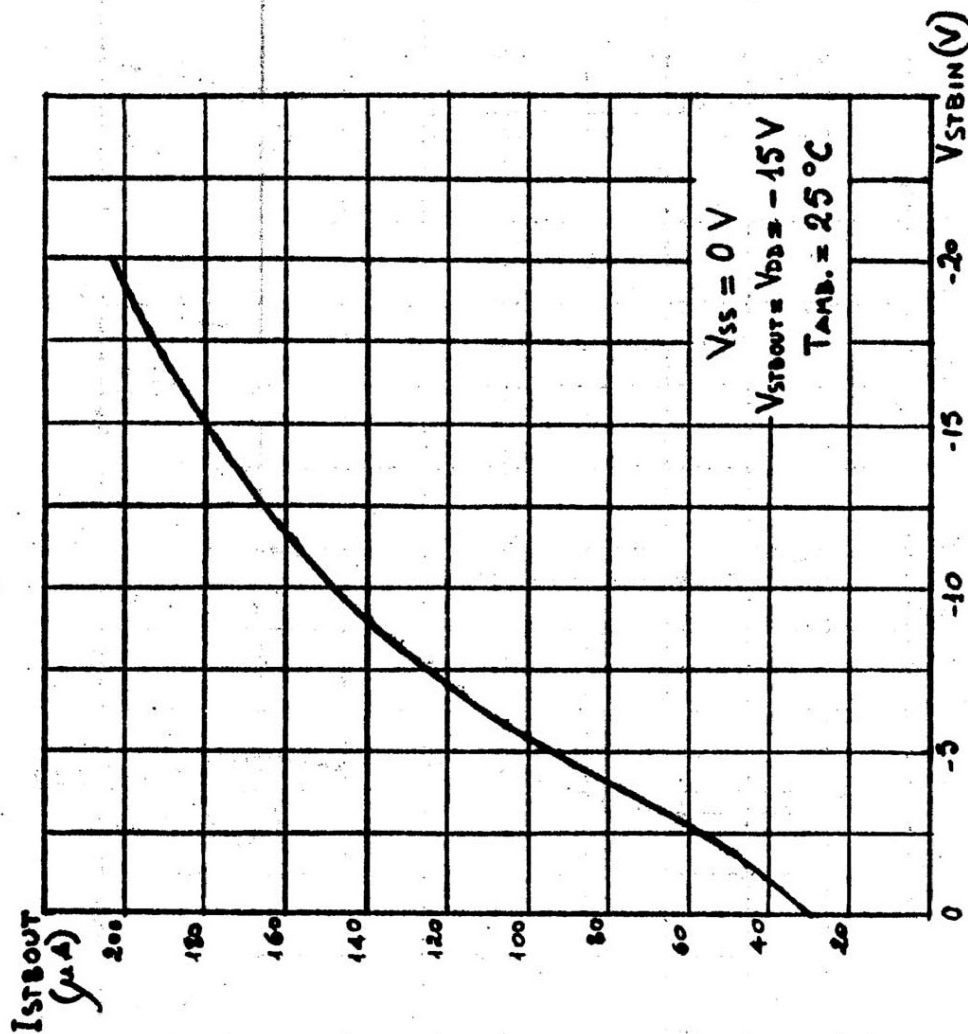
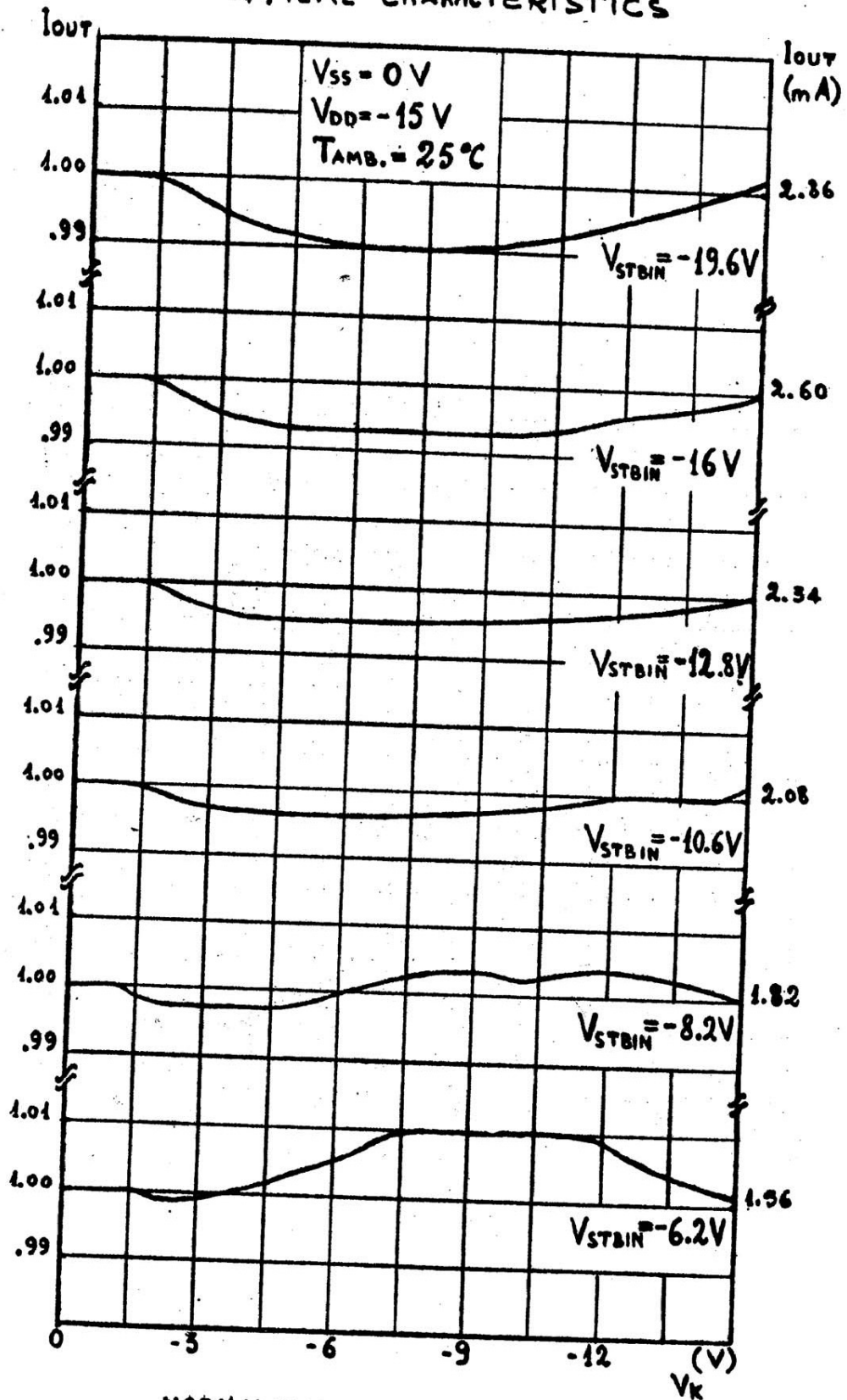


FIG. D

PIN 1 & PIN 24  
TYPICAL CHARACTERISTICS



NORMALIZED D.C. OUTPUT CURRENTS

$V_S$

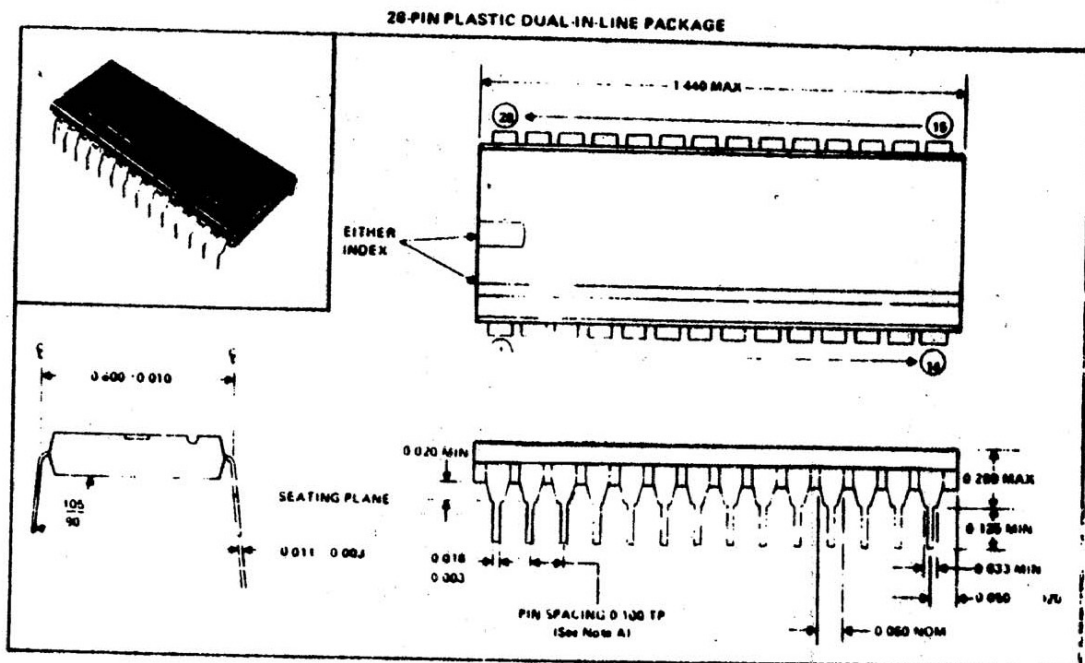
SINGLE K INPUT VOLTAGE

FIG. E

PIN ASSIGNMENT

<u>PIN NBR</u>	<u>FUNCTION</u>
1	NC
2	NC
3	16' OUT
4	SUSTAIN BIAS
5	VSS
6	K 8
7	K 9
8	K 10
9	K 11
10	K 12
11	K 13
12	RESET OUT
13	CLOCK IN
14	VDD
15	CLOCK OUT
16	RESET IN
17	K 1
18	K 2
19	K 3
20	K 4
21	K 5
22	K 6
23	K 7
24	STBIN†
25	STBOUT
26	8' OUT
27	NC
28	NC

## MECHANICAL CHARACTERISTICS



**NOTE A:** Each pin centerline is located within 0.010 of its true longitudinal position.

**B:** All linear dimensions are in inches.