



INTEGRATED CIRCUIT

TECHNICAL DATA

TA7203P

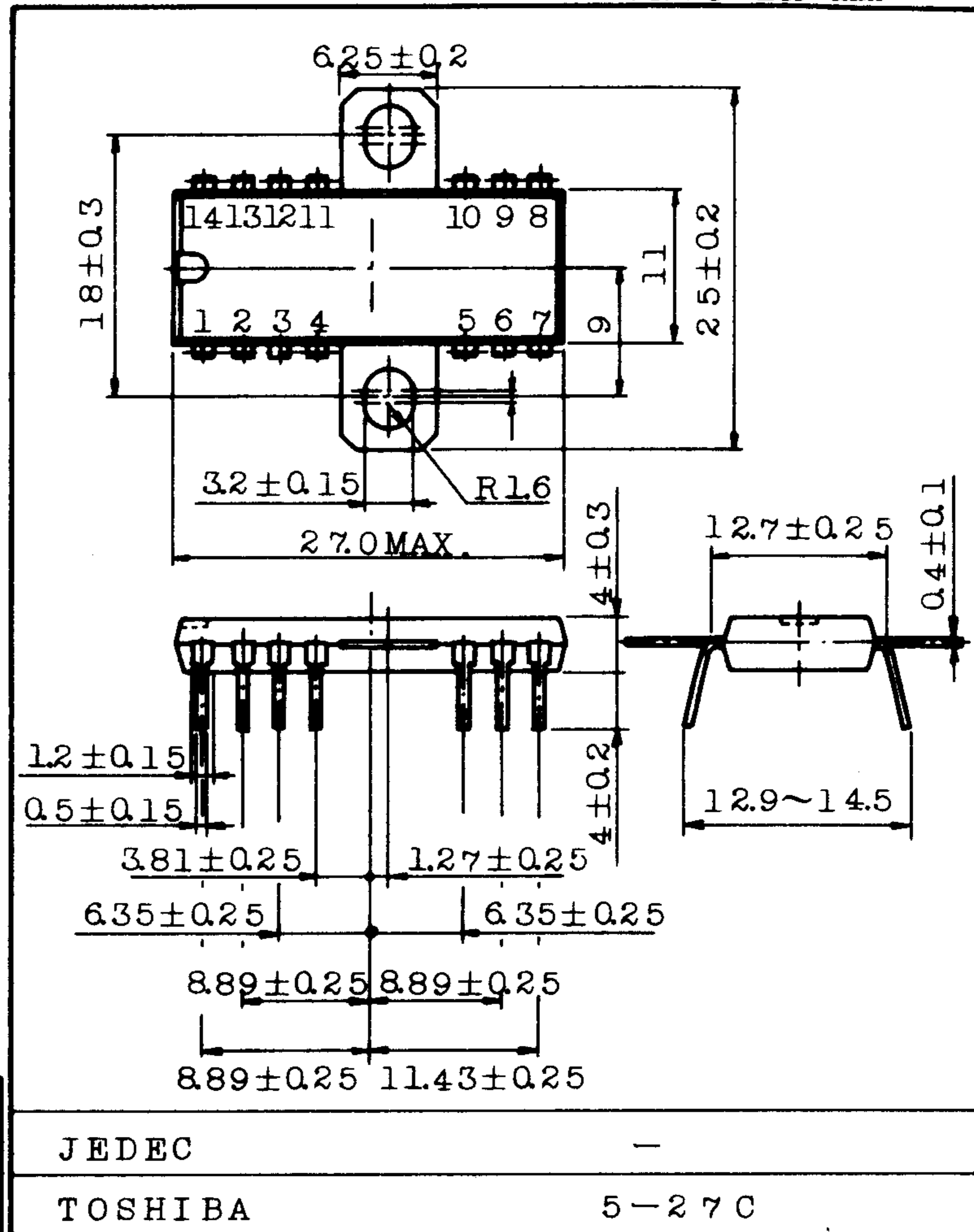
TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT

SILICON MONOLITHIC

2W DUAL AUDIO POWER AMPLIFIER

- Dual Power Amplifier 2-Watts Per Channel Economical Type Stereo, Taperecorder Output Uses.
- Excellent Channel Separation (Typ. -55dB) and High Ripple Rejection Ratio.
- Wide Operating Supply Voltage Range : $V_{CC}=8 \sim 20V$
- Excellent Frequency and Thermal Stabilities.

Unit in mm



MAXIMUM RATINGS (Ta=25°C)

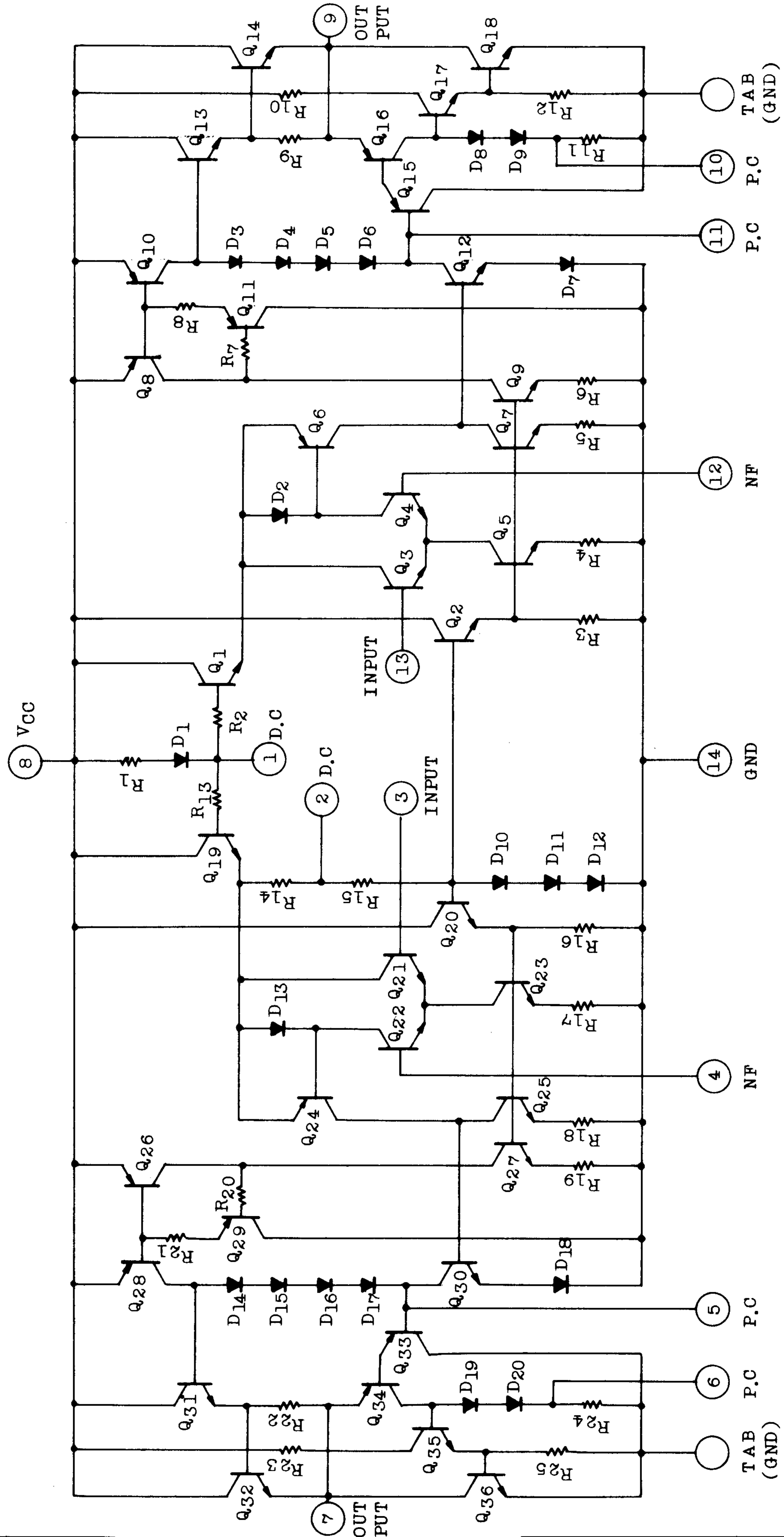
CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	20	V
Output Current (Peak)	$I_O(\text{peak})$	1.2 (Each channel)	A
Power Dissipation	P_D	5.0	W
Operating Temperature	T_{opr}	-20 ~ 75	°C
Storage Temperature	T_{stg}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS

(Unless otherwise specified, $V_{CC}=14V$, $R_L=8\Omega$, $R_f=1k\Omega$, $T_a=25^\circ C$, $R_g=600\Omega$, $f=1kHz$)

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Quiescent Current	I_{CCQ}	-	$V_{CC}=14V$	18	37	60	mA
			$V_{CC}=20V$	-	-	75	
Maximum Output Power	P_{OM}	-	THD=10%	1.5	2.0	-	W
Voltage Gain	G_V	-	$R_f=0\Omega$, $V_{IN}=0.245mV_{rms}$	72.0	-	-	dB
			$R_f=1k\Omega$, $V_{IN}=10mV_{rms}$	-	40	-	
Total Harmonic Distortion	THD	-	$P_{OUT}=50mW$	-	0.1	1.0	%
			$P_{OUT}=500mW$	-	0.05	1.0	
Output Noise Voltage	V_{NO}	-	$R_g=33k\Omega$, $BW=50Hz \sim 20kHz$	-	-	1.5	mV_{rms}
Channel Separation	CSR	-	$R_g=\infty$, $P_{OUT}=1.5W$	-	-55	-	dB
Input Resistance	R_{IN}	-	$V_{OUT}=2V_{rms}$	-	80	-	$k\Omega$

EQUIVALENT CIRCUIT



D.C : De coupling
P.C : phase compensation

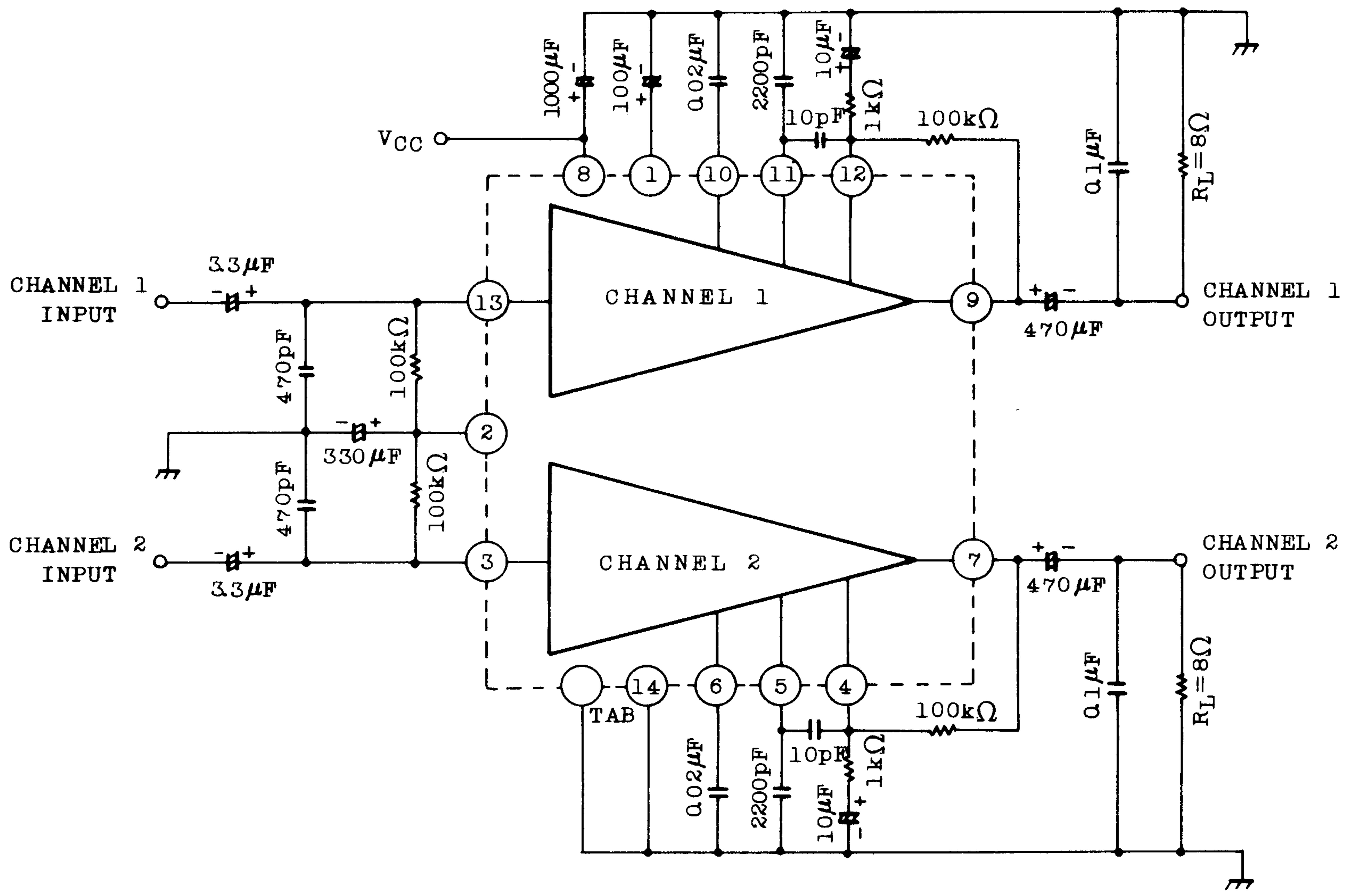


INTEGRATED CIRCUIT

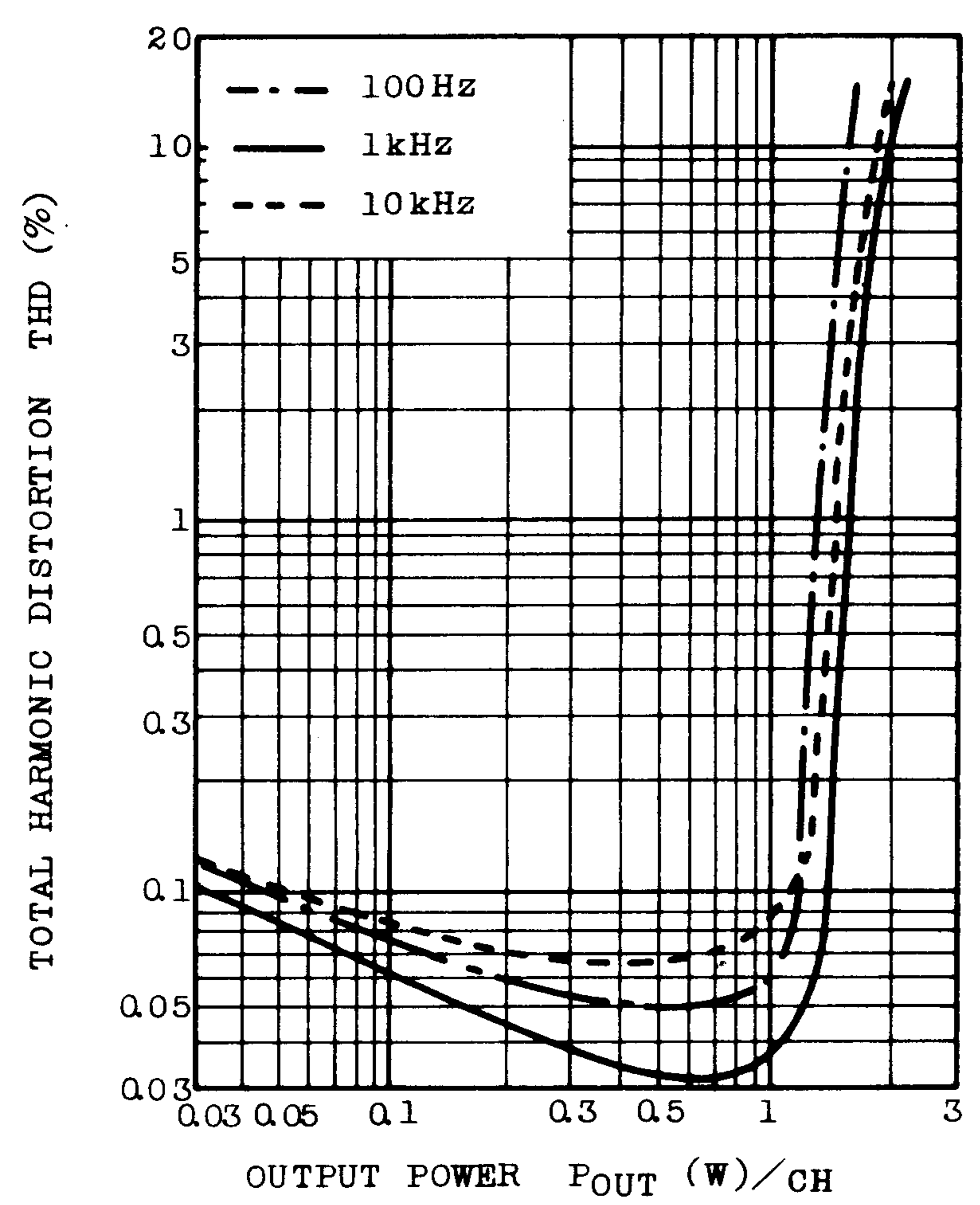
TA7203P

TECHNICAL DATA

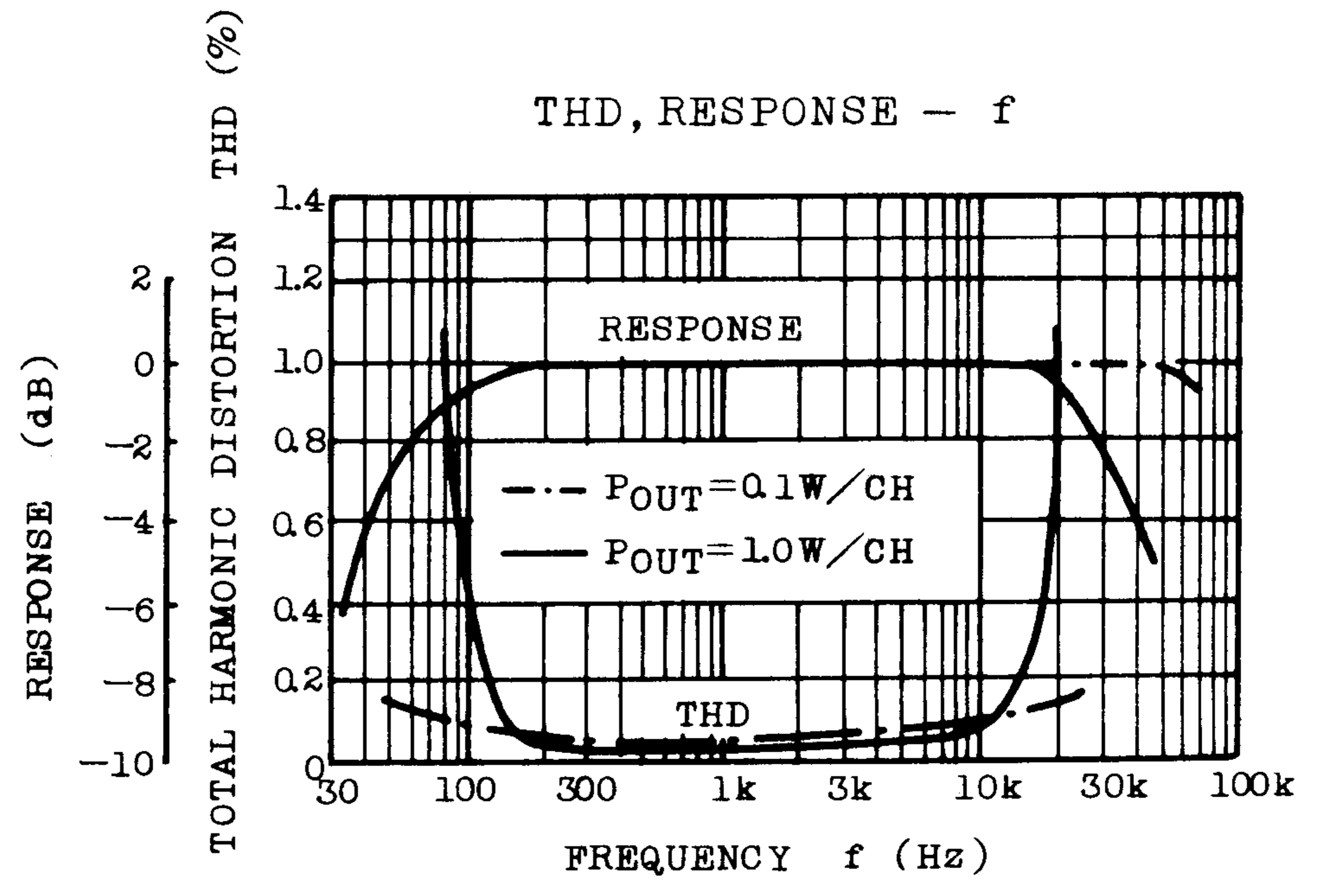
TEST CIRCUIT



THD - P_{OUT}



THD, RESPONSE - f



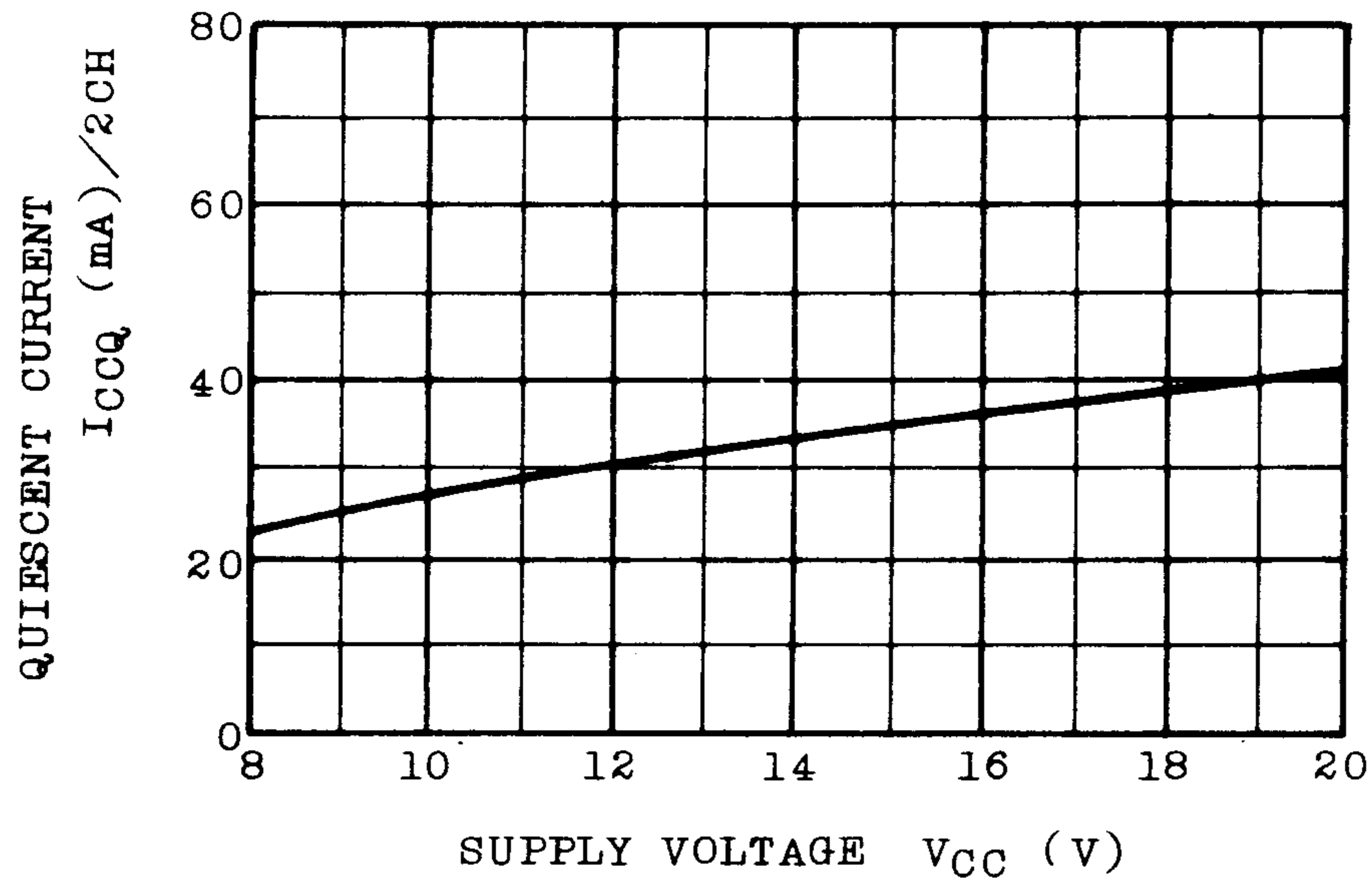


INTEGRATED CIRCUIT

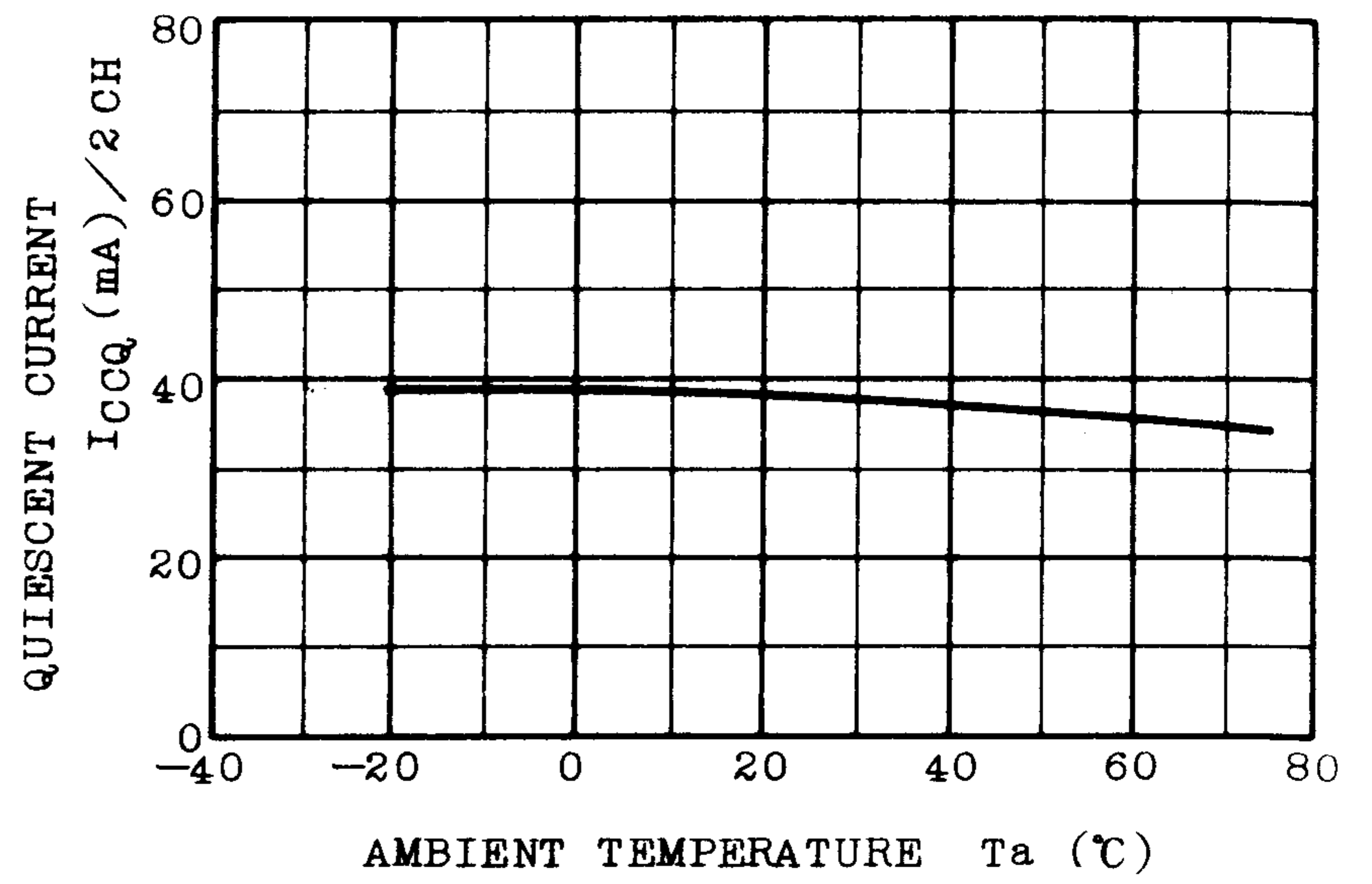
TA7203P

TECHNICAL DATA

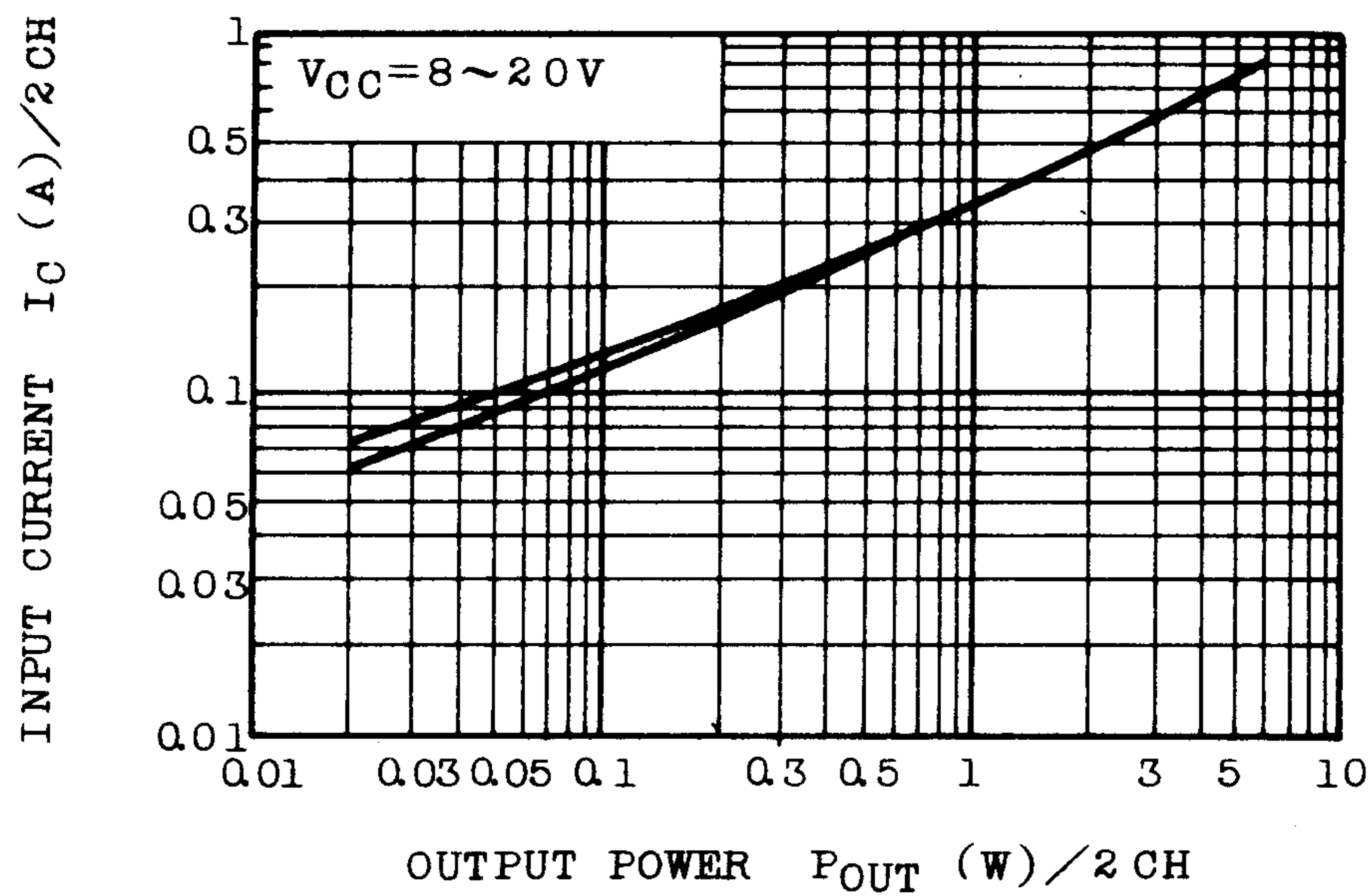
$I_{CCQ} - V_{CC}$



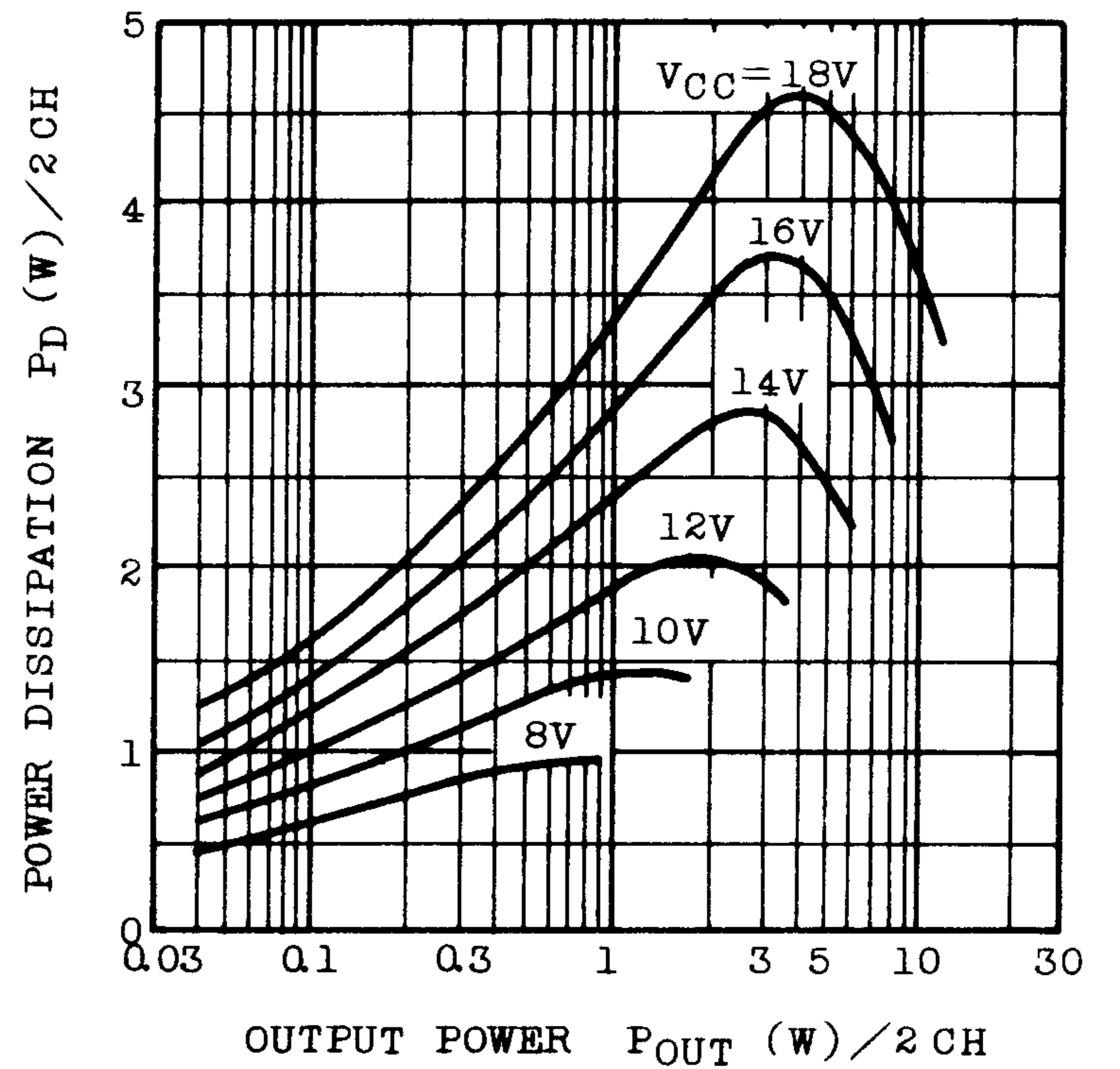
$I_{CCQ} - T_a$



$I_C - P_{OUT}$



$P_D - P_{OUT}$



$P_D - T_a$

