

■ ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V*	8	V
Power Dissipation	P <sub>D</sub>	(DIP8) 500 (DMP8) 300	mW
Operating Temperature Range	T <sub>opr</sub>	-40 ~ +85	°C
Storage Temperature Range	T <sub>stg</sub>	-40 ~ +125	°C
Maximum Input Voltage	V <sub>imax</sub>	V* - 1	V

■ ELECTRICAL CHARACTERISTICS

(Ta=25°C, V\*=3V)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Voltage	V'		0.9	—	7	V
Operating Current	I <sub>cc</sub>	V <sub>IN</sub> =0mVrms, R <sub>L</sub> =∞	0.2	0.55	1.5	mA
Input Sensitivity	V <sub>ins</sub>	f=1kHz	-39	-36	-33	dBV
Attack Time (note 1)	T <sub>ate</sub>	C <sub>R</sub> =10μF, f=1kHz	—	1	25	mSec
Recovery Time (note 2)	T <sub>rec</sub>	C <sub>R</sub> =10μF, f=1kHz	—	2	—	Sec
Output Current at ON(OUT 1)	I <sub>O1 on</sub>	V <sub>in</sub> =30mVrms, V <sub>o</sub> =0.3V	1	3	—	mA
Output Current at ON(OUT 2)	I <sub>O2 on</sub>	V <sub>in</sub> =0mVrms, V <sub>o</sub> =0.3V	1	3	—	mA
Output Current at OFF(OUT1)	I <sub>O1 off</sub>	V <sub>in</sub> =0mVrms, V <sub>o</sub> =8V	—	—	1	μA
Output Current at OFF(OUT2)	I <sub>O2 off</sub>	V <sub>in</sub> =30mVrms, V <sub>o</sub> =8V	—	—	1	μA
Input Resistance	R <sub>in</sub>		16	20	24	kΩ
Charge Current	I <sub>chg</sub>		1.0	2.0	3.0	μA

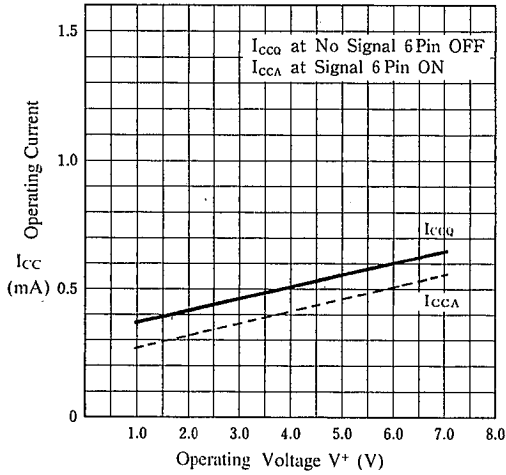
(note 1) Attack Time: Period from putting input signal of more than minimum input sensitive signal to output level change.

(note 2) Recovery Time: Period from input signal becoming lower than minimum input sensitive signal to output level change.

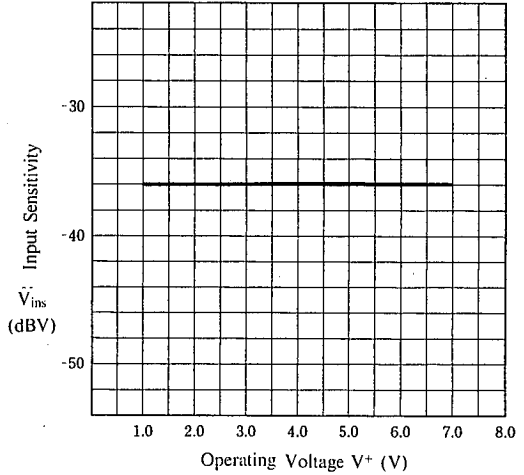


■ TYPICAL CHARACTERISTICS

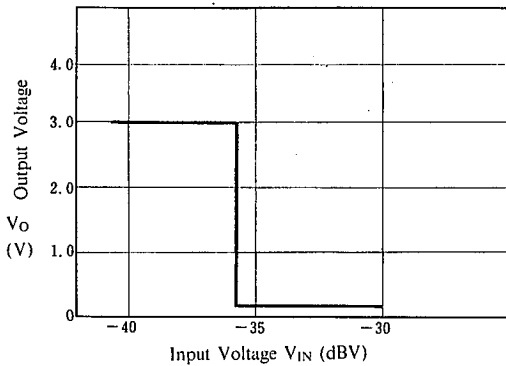
Operating Current vs. Operating Voltage  
( $T_a=25^\circ\text{C}$ )



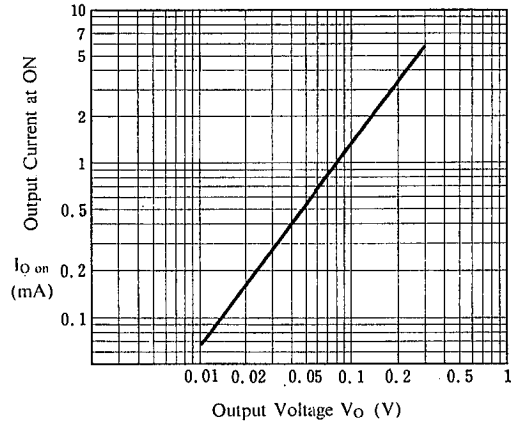
Input Sensitivity vs. Operating Voltage  
( $T_a=25^\circ\text{C}$ ,  $f=1\text{kHz}$ )



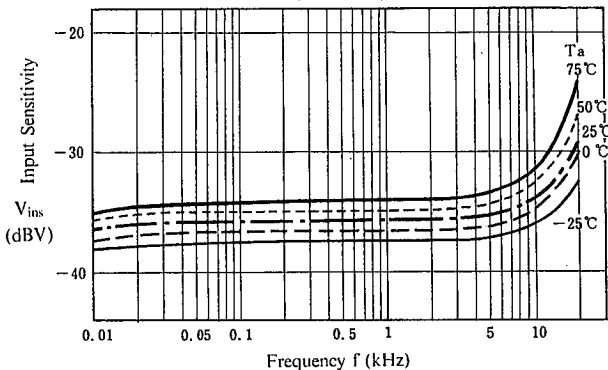
Output Voltage vs. Input Voltage  
( $V^+=3\text{V}$ ,  $f=1\text{kHz}$ , 6 Pin,  $T_a=25^\circ\text{C}$ )



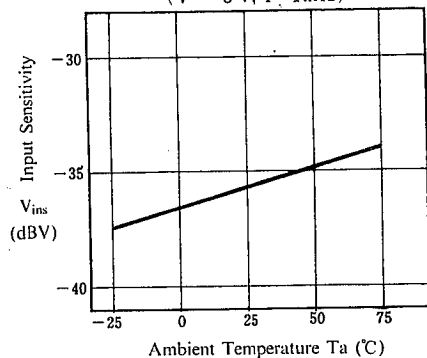
Output Current at ON vs. Output Voltage



Input Sensitivity vs. Frequency  
( $V^+=3\text{V}$ )



Input Sensitivity vs. Ambient Temperature  
( $V^+=3\text{V}$ ,  $f=1\text{kHz}$ )

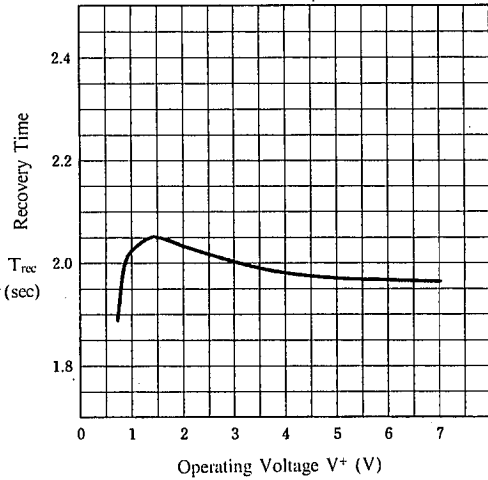


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■ TYPICAL CHARACTERISTICS

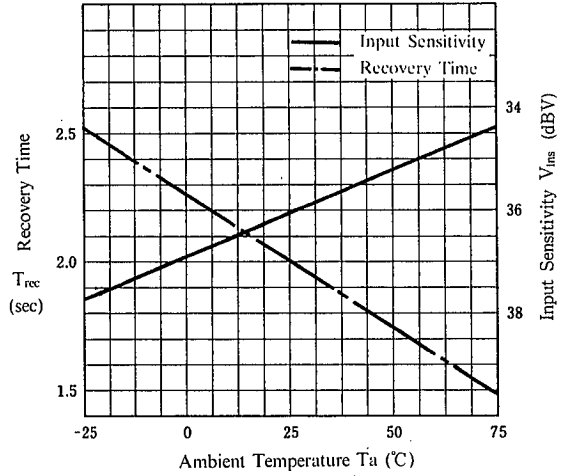
Recovery Time vs. Operating Voltage

( $T_a = 25^\circ\text{C}$ ,  $C_R = 10\mu\text{F}$ )



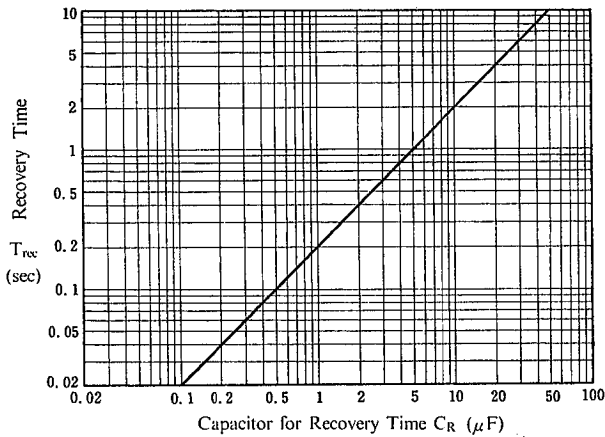
Input Sensitivity Recovery Time vs. Ambient Temperature

( $V^+ = 3\text{V}$ ,  $C_R = 10\mu\text{F}$ )



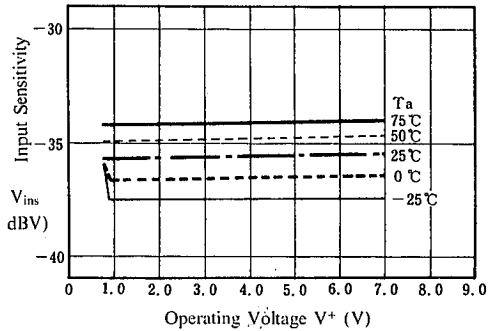
Recovery Time Characteristics

( $f = 1\text{kHz}$ )



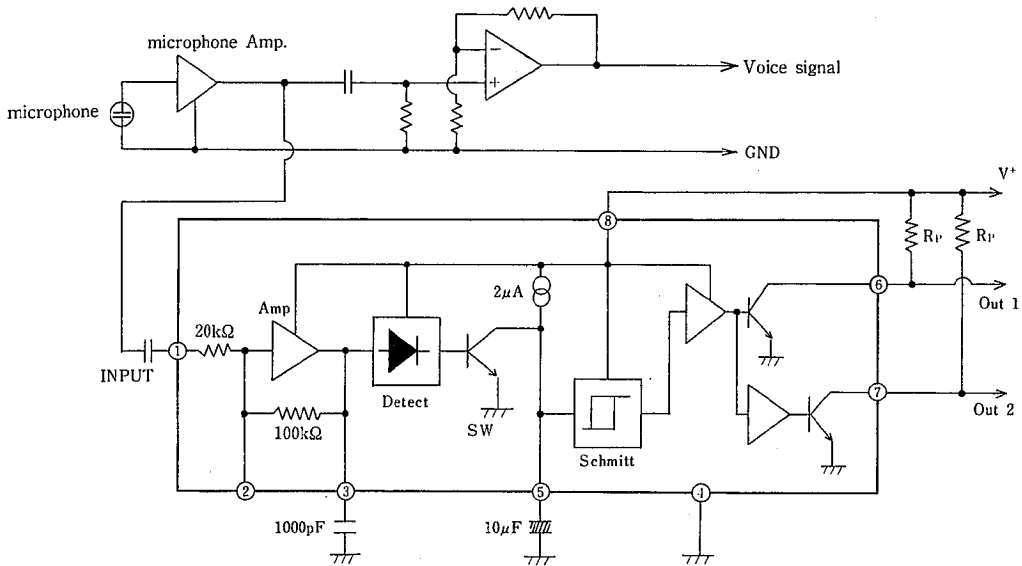
Input Sensitivity vs. Operating Voltage

( $f = 1\text{kHz}$ )



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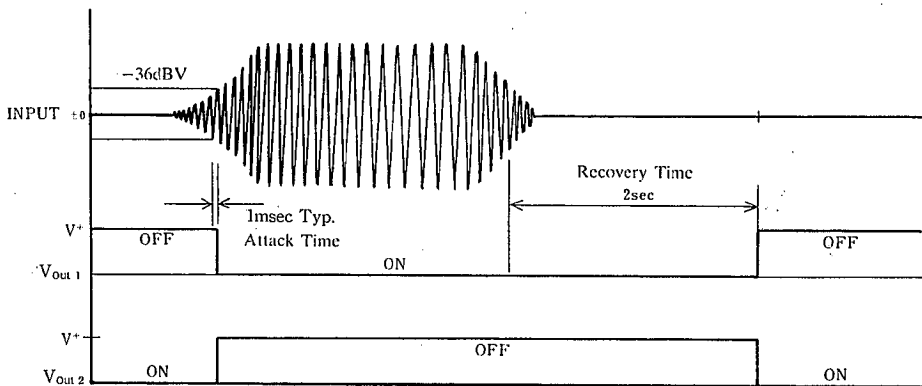
## TYPICAL APPLICATIONS



Pins 6 and 7 show an open collector. Mount resistor  $R_p$  shown by the following equation.

$$R_p = (V^+_{MIN} - 0.2) / 0.3 \text{ (k}\Omega\text{)}$$

Resistor  $R_p$  to pin 7 is omissible, if pin 6 only is used. But resistor  $R_p$  to pin 6 should be put when Out 2 only is used.  $V^+_{MIN}$  is minimum supply voltage.



## MEMO

[CAUTION]

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