SIGNAL LEVEL SENSOR SYSTEM

GENERAL DESCRIPTION

PACKAGE OUTLINE

The NJM2072 is a monolithic integrated circuit designed for signal level sensor system. The NJM2070 features low power, low voltage operation, and high input sensitivity and is suited for the signal level sensor system for micro cassette, vox for telecommunications.

(0.9V~7V)

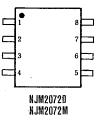
0.55mA typ.

-36dB typ. DIP8, DMP8

- FEATURES
- Operating Voltage
- Low Operating Current
 - High Input Sensitivity
- Package Outline
- Bipolar Technology

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PIN CONFIGURATION



- PIN FUNCTION 1. INPUT
- 2. Gain Control
- 3. Amp. Output
- 4. GND
- 5. Capacitor for Recovery time
- 6. OUT1
 - 7. OUT2 8. V⁺
- BLOCK DIAGRAM NPUT -36dBV t 2 1000p 1000p 100p 100p 100p 100p 100p 100p 100p 100p 10p 10p10p

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NJM2072D



NJM2072M

ABSOLUTE MAXIMUM RATINGS			
PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V*	8	V .
Power Dissipation	PD	PD (DIP8) 500	
		(DMP8) 300	mW
Operating Temperature Range	Topr	-40~+85	°C.
Storage Temperature Range	Tstg	-40~+125	°C
Maximum Input Voltage	Vimax	V+-1	v

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Voltage	V*		0.9	_	7	v
Operating Current	I _{ee}	$V_{1N} = 0 \text{mV rms}, R_L = \infty$	0.2	0.55	1.5	mΑ
Input Sensitivity	V _{ins}	f=1kHz	-39	-36	-33	dBV
Attack Time (note 1)	Tate	$C_R = 10\mu F$, f=1kHz		1	25	mSec
Recovery Time (note 2)	Tree	$C_R = 10 \mu F$, f = 1kHz		2		Sec
Output Current at ON(OUT 1)	IOI on	V_{in} =30mVrms. V_o =0.3V	1	3	-	mA
Output Current at ON(OUT 2)	1 _{O2 on}	$V_{in}=0mVrms, V_o=0.3V$	1	3		mA
Output Current at OFF(OUT1)	Loron	$V_{in}=0mVrms$, $V_{o}=8V$	-	-	1	μA
Output Current at OFF(OUT2)	IO2 off	$V_{in}=30mVrms$, $V_{o}=8V$			1	μA
Input Resistance	Rin		16	20	24	kΩ
Charge Current	lchg		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.

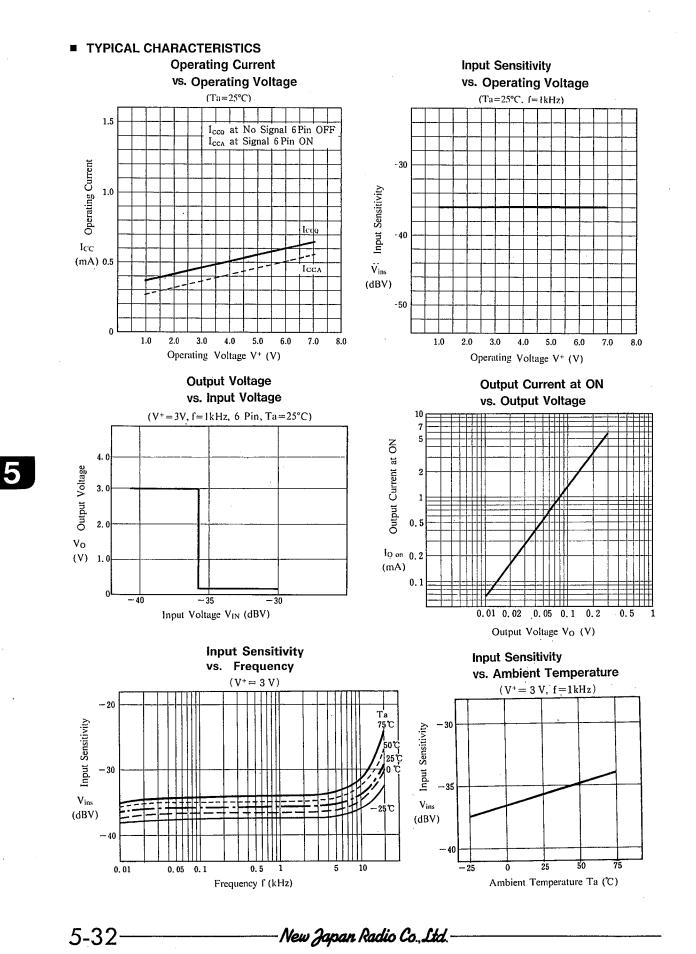
(note 2) Recovery Time: Period from input signal becoming lower than minimum input sensitine signal to output level change.

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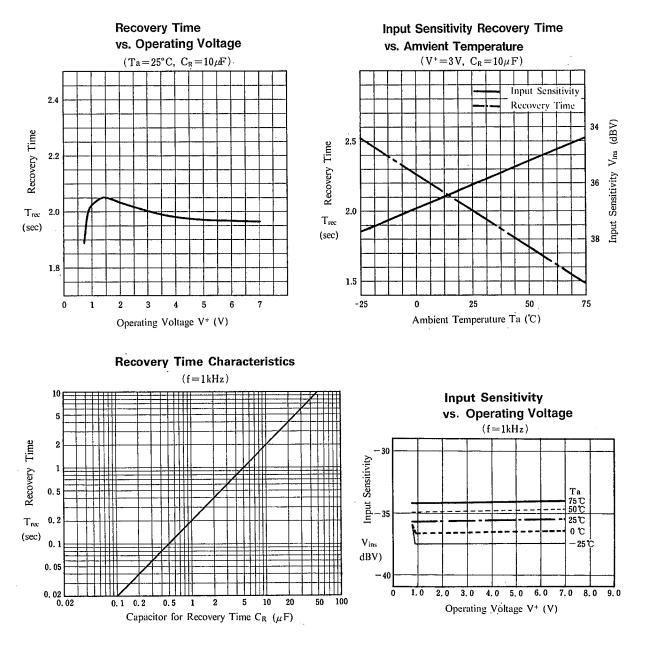
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TYPICAL CHARACTERISTICS



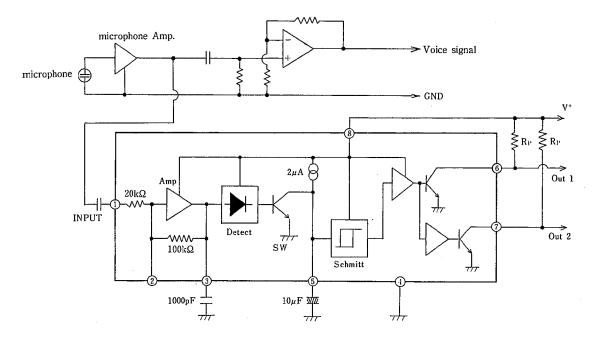
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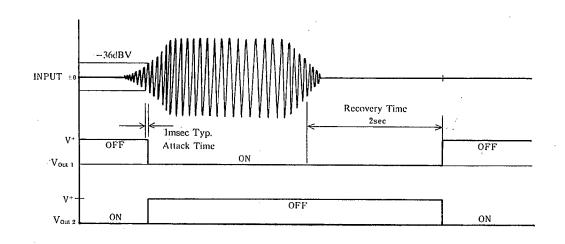
NJM2072

TYPICAL APPLICATIONS



Pins 6 and 7 show an open collector. Mount resistor R_p shown by the following equation. $R_p{=}(V^+{}_{MIN}{-}0.2)/0.3~(k\Omega)$

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.



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MEMO

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