

**SANYO**

No.1967B

**LA6082D,6082S****J-FET Input  
Dual Operational Amplifiers**

The LA6082 is a J-FET input dual operational amplifier. Application areas include general-purpose control equipment, measuring equipment (very low current measurement, long-integrating circuit, sample & hold circuit, impedance converter, etc.).

**Features**

- . High slew rate
- . High input impedance
- . Low input bias current
- . Low input offset current
- . No phase compensation required

**Maximum Ratings at Ta=25°C**

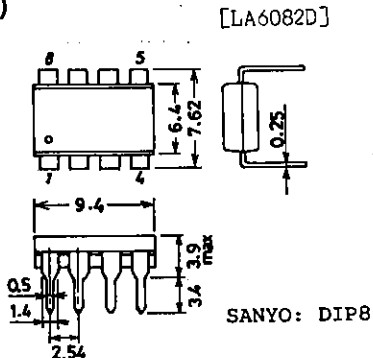
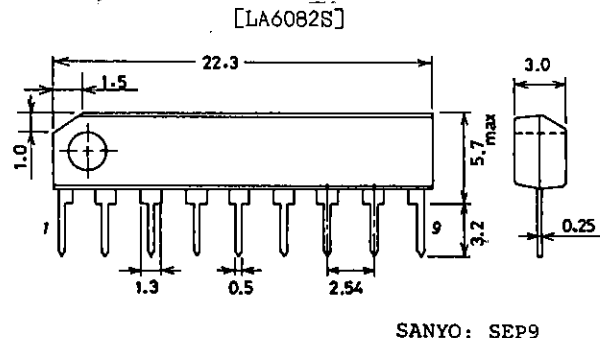
			unit
Maximum Supply Voltage	$V_{CC}/V_{EE}$	$\pm 18$	V
Differential Input Voltage	$V_{ID}$	$\pm 30$	V
Common-Mode Input Voltage	$V_{IN}$ (Note)	$\pm 15$	V
Allowable Power Dissipation	$P_d$ max	570	mW
Operating Temperature	$T_{opr}$	-30 to +85	°C
Storage Temperature	$T_{stg}$	-55 to +125	°C

(Note) Allowable in the range of supply voltage. The above value is for  $V_{CC}=+15V$ ,  $V_{EE}=-15V$ .

**Operating Characteristics at Ta=25°C,  $V_{CC}=+15V$ ,  $V_{EE}=-15V$** 

		min	typ	max	unit
Input Offset Voltage	$V_{IO}$ $R_S=50\text{ohms}$		5.0	15.0	mV
Input Offset Current	$I_{IO}$		5	200	pA
Input Bias Current	$I_B$		30	400	pA
Common-Mode Input Voltage Range	$V_{ICM}$	$\pm 10$			V
Common-Mode Rejection Ratio	CMR	70	76		dB
Large Amplitude Voltage Gain	VG $R_L \geq 2\text{kohms}, V_o = \pm 10V$	25	200		V/mV
Maximum Output Voltage	$V_{opp1}$ $R_L \geq 10\text{kohms}$	$\pm 12$	$\pm 13.5$		V
	$V_{opp2}$ $R_L \geq 2\text{kohms}$	$\pm 10$	$\pm 12$		V

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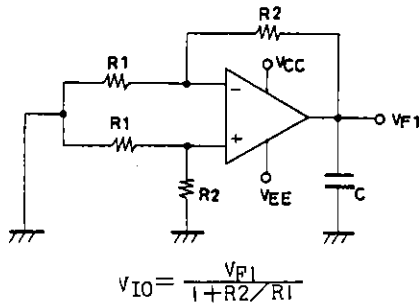
**Package Dimensions 3001B-D8IC  
(unit: mm)****Package Dimensions 3017B-S9IC  
(unit: mm)**

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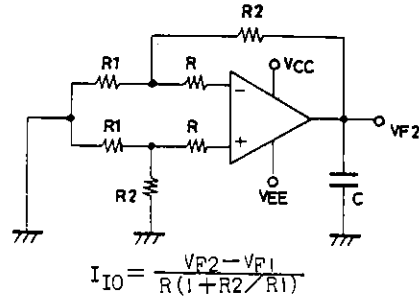
			min	typ	max	unit
Supply Voltage Rejection Ratio	SVR		70	76		dB
Supply Current	$I_{CC}$	$R_L = \infty$		4	5.6	mA
Gain-Bandwidth Product	$f_T$	$A_V = 1$		3		MHz
Equivalent Input Noise Voltage	$V_{NI}$	$R_S = 100\text{ohms},$ $f = 10\text{Hz to } 10\text{kHz}$		4		$\mu\text{Vrms}$
Input Resistance	$r_i$			$10^{12}$		ohm
Channel Separation	C·S			120		dB
Slew Rate	S·R	$R_L = 2\text{kohms}, C_i = 100\text{pF},$ $A_V = 1, V_{IN} = 10\text{V}$		13		V/us

Test Circuits

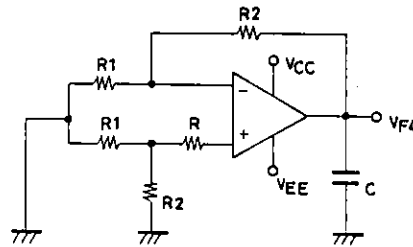
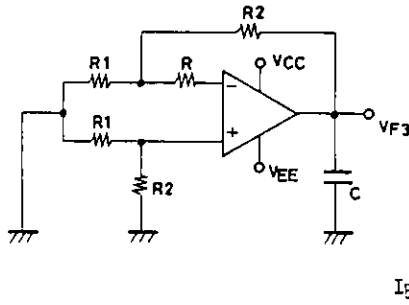
1. Input Offset Voltage  $V_{IO}$



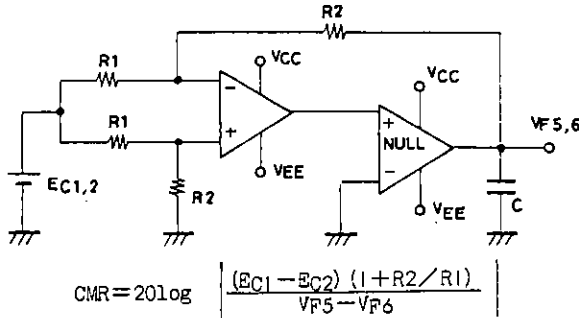
2. Input Offset Current  $I_{IO}$



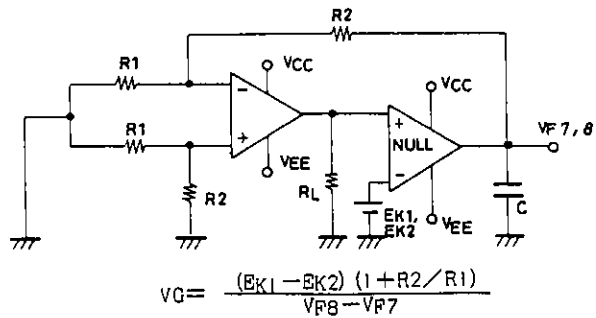
3. Input Bias Current  $I_B$



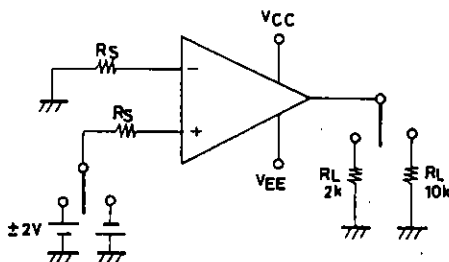
4. Common-Mode Rejection Ratio CMR  
Common-Mode Input Voltage Range  $V_{ICM}$



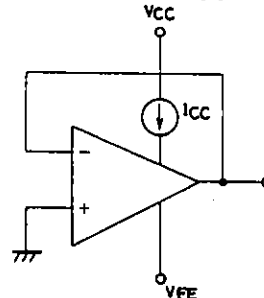
5. Voltage Gain VG



6. Maximum Output Voltage  $V_{opp}$

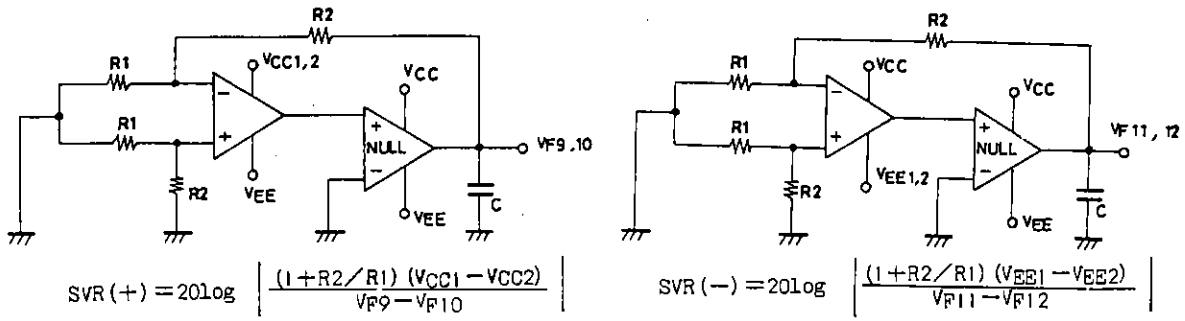


7. Supply Current  $I_{CC}$

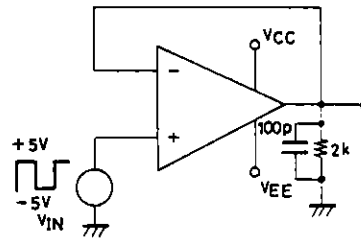
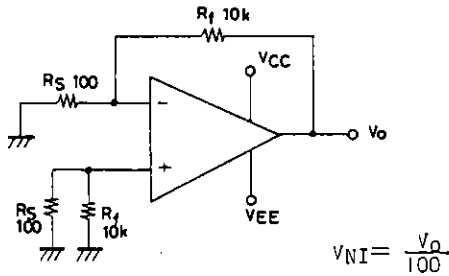


Unit (resistance:  $\Omega$ )

8. Supply Voltage Rejection Ratio SVR

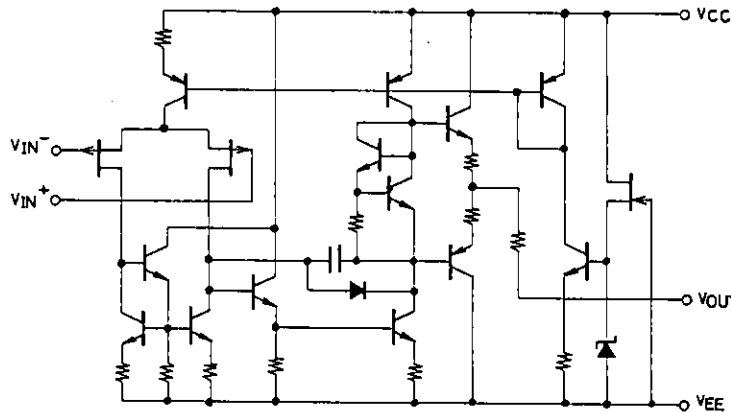


9. Equivalent Input Noise Voltage  $V_{NI}$  10. Slew Rate SR

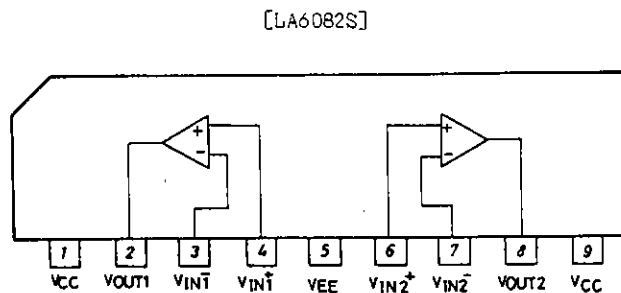
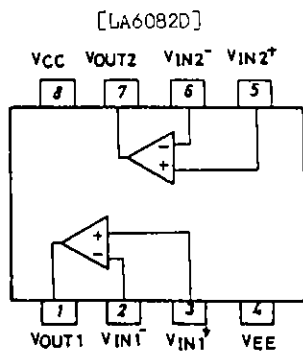


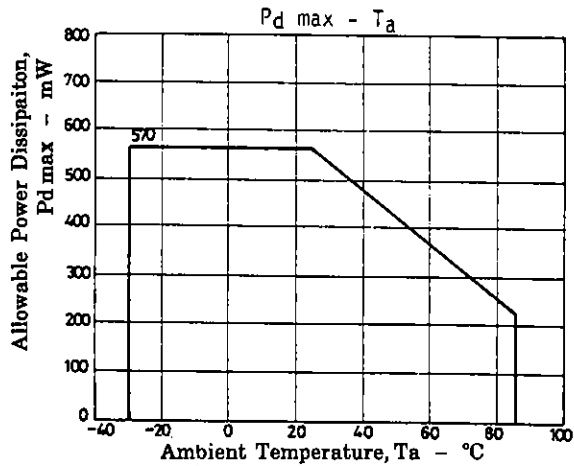
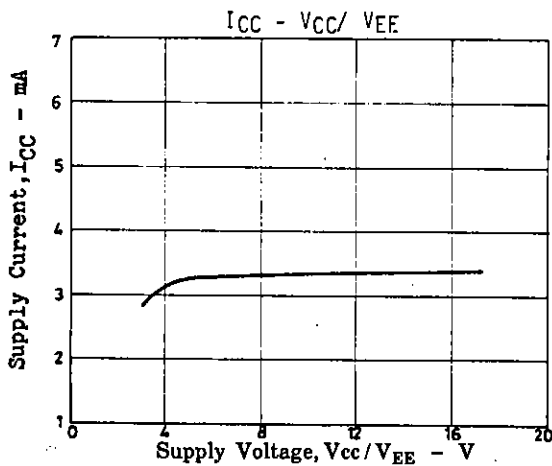
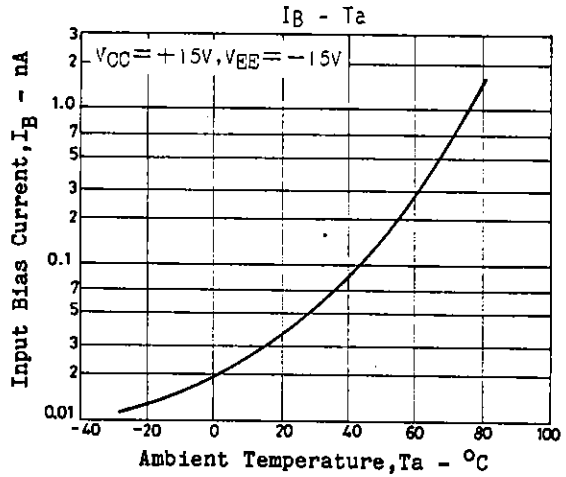
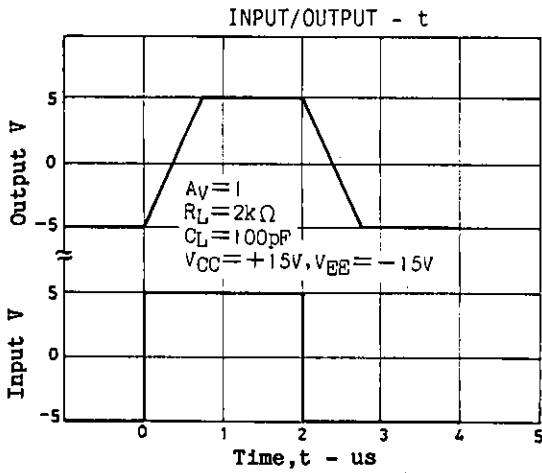
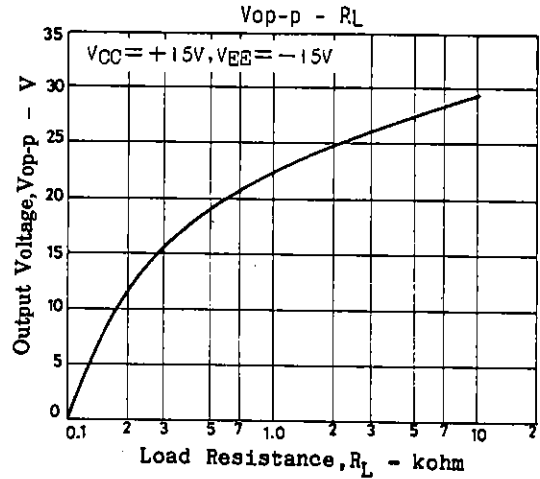
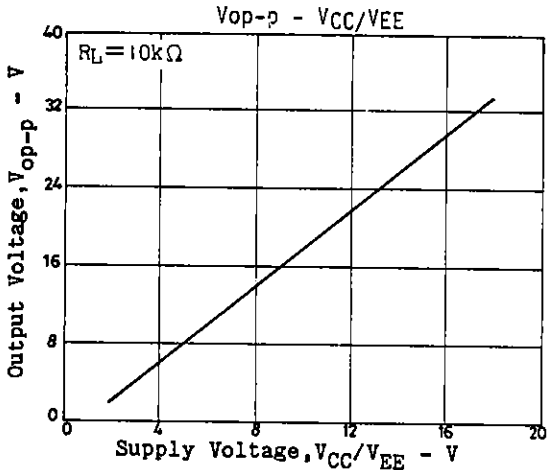
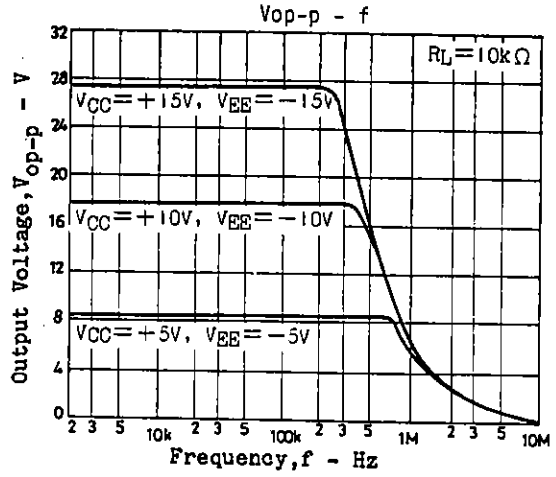
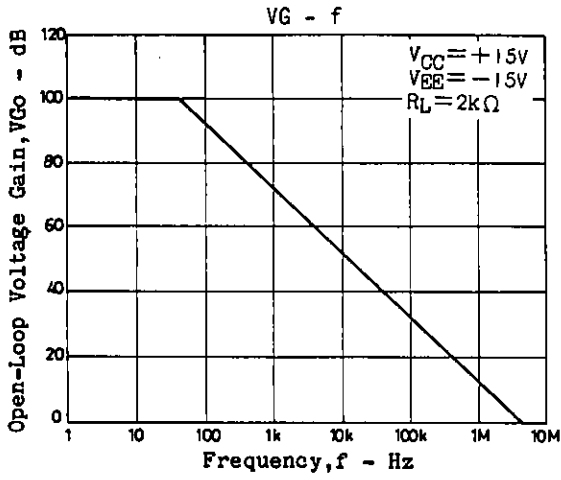
Equivalent Circuit

Unit (resistance:Ω capacitance:F)

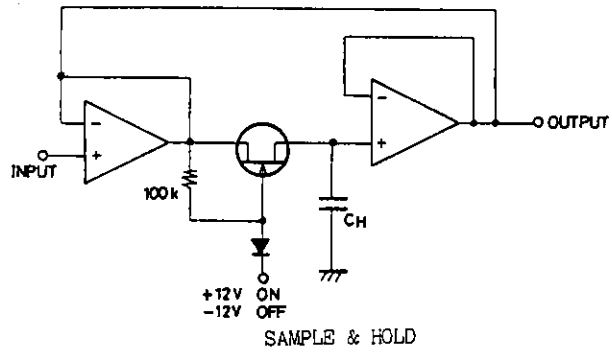
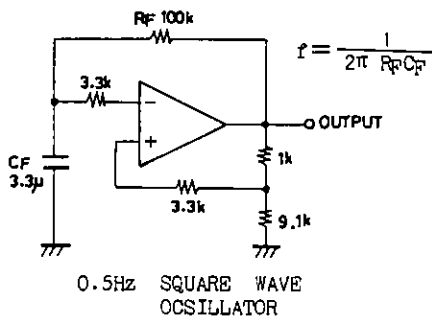


Pin Assignment





## Application Circuits

Unit (resistance:  $\Omega$ , capacitance: F)

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