



No.911C

LA6458D,6458S

Monolithic Linear IC

**High-Performance
Dual Operational Amplifiers**

The LA6458 consists of two independent, internally phase compensated operational amplifiers. Application areas include active filters, audio preamplifiers, and various electronic circuits.

Features

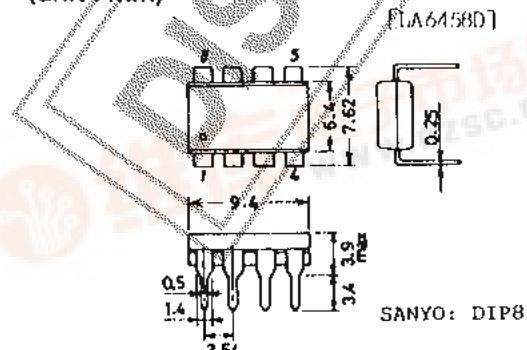
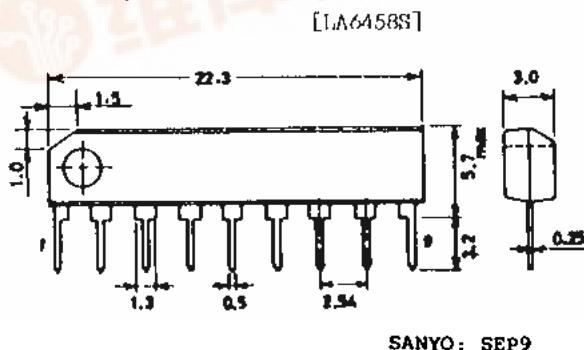
- LA6458D : 8-pin DIP, LA6458S : 9-pin SEP
- On-chip phase compensation circuit.
- High gain, low noise.
- Slew rate : 1.1V/us typ.

Maximum Ratings at $T_a=25^\circ\text{C}$

	V_{CC}/V_{EE}	unit
Supply Voltage	± 18	V
Differential Input Voltage	± 30	V
Common-Mode Input Voltage	± 15	V
Allowable Power Dissipation	500	mW
LA6458D	500	mW
LA6458S	500	mW
Operating Temperature	-20 to +75	$^\circ\text{C}$
Storage Temperature	-40 to +125	$^\circ\text{C}$

Operating Characteristics at $T_a=25^\circ\text{C}$, $V_{CC}=15\text{V}$, $V_{EE}=-15\text{V}$

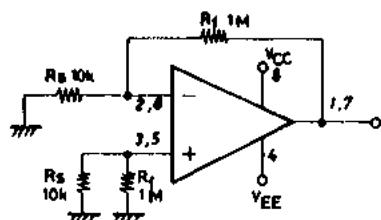
	min	typ	max	unit	
Input Offset Voltage	V_{IO}	$R_S \leq 10\text{kohms}$	0.5	6	mV
Input Offset Current	I_{IO}		5	200	nA
Input Bias Current	I_B		60	500	nA
Common-Mode Input Voltage	V_{ICM}		± 12	± 14	V
Common-Mode Rejection Ratio	CMR		70	90	dB
Voltage Gain	V_{GO}	$R_L \geq 2\text{kohms}, V_O = \pm 10\text{V}$	86	100	dB
Maximum Output Voltage	V_O	$R_L \geq 10\text{kohms}$	± 12	± 14	V
		$R_L \geq 2\text{kohms}$	± 10	± 13	V
Slew Rate	SR	$V_G=0, R_L \geq 2\text{kohms}$	1.1		V/ μs
Equivalent Input Noise Voltage	V_{NI}	$R_S = 1\text{kohm}$, B. P. F = 10Hz to 30kHz	1.7		μV
Current Dissipation	I_{CO}		3.5	6	mA
Supply Voltage Rejection	SVR	$R_S \leq 10\text{kohms}$	30	150	$\mu\text{V/V}$

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

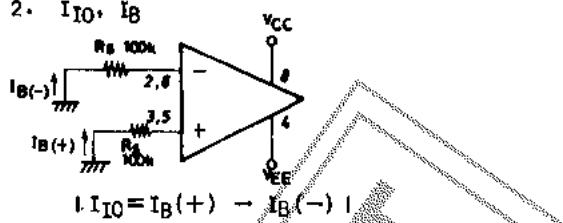
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Test Circuits(Pin assignment: DIP)

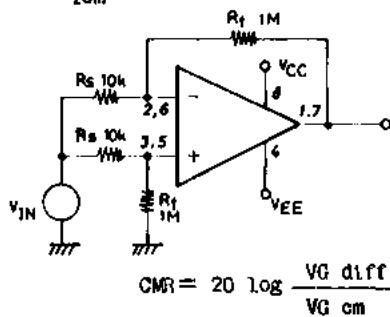
1. V_{IO} , SVR



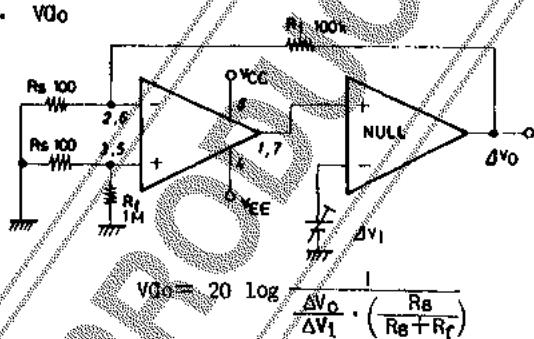
2. I_{IO}, I_B



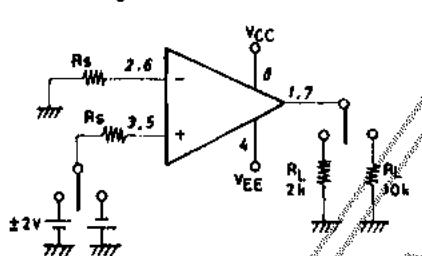
3. V_{ICM} , CMR



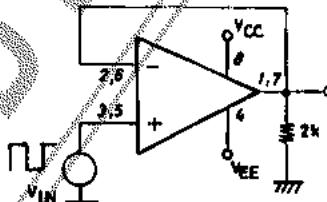
4. V_O



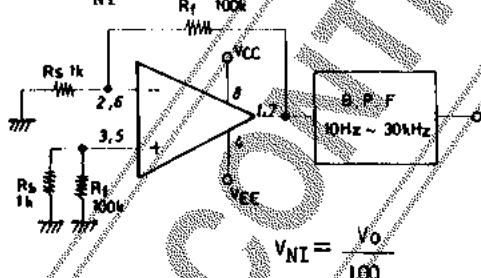
5. V_O



6. SR

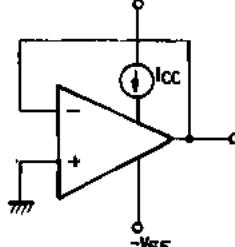


7. V_{NI}

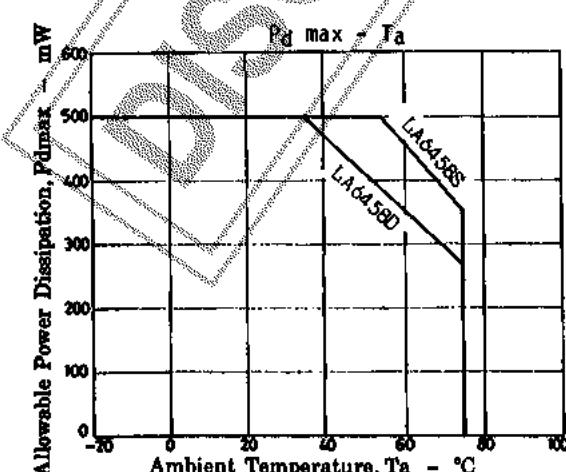


$$V_{NI} = \frac{V_O}{100}$$

8. I_{CO}

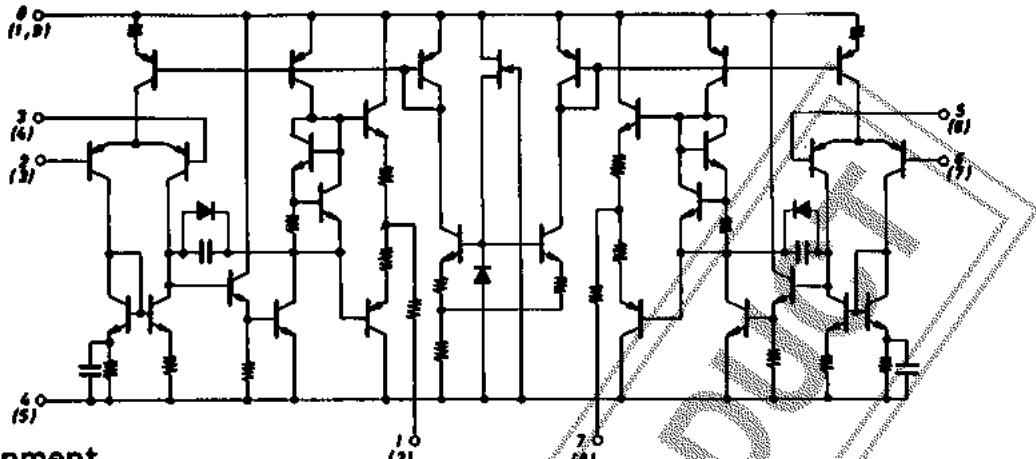


Unit (resistance: Ω)

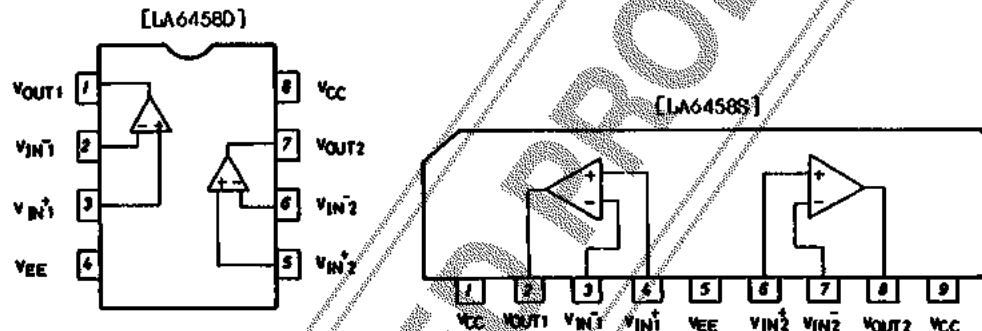


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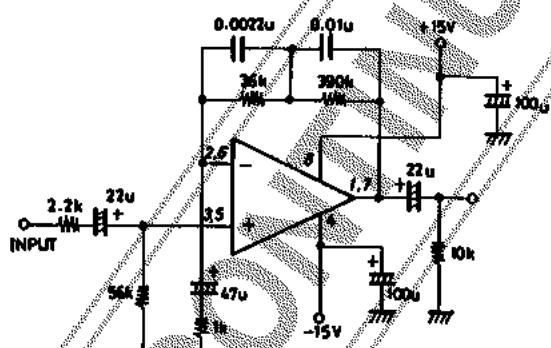
Equivalent Circuit : () of pin No. : LA6458S



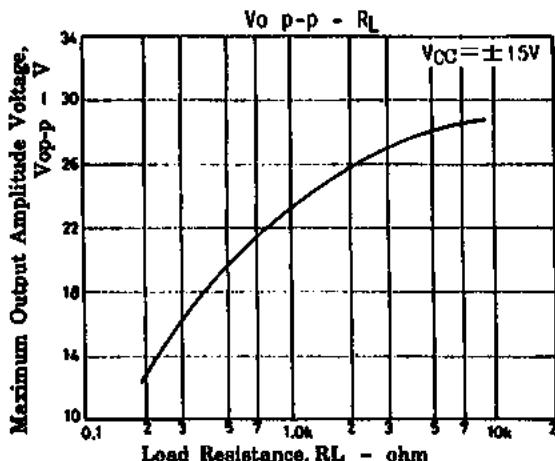
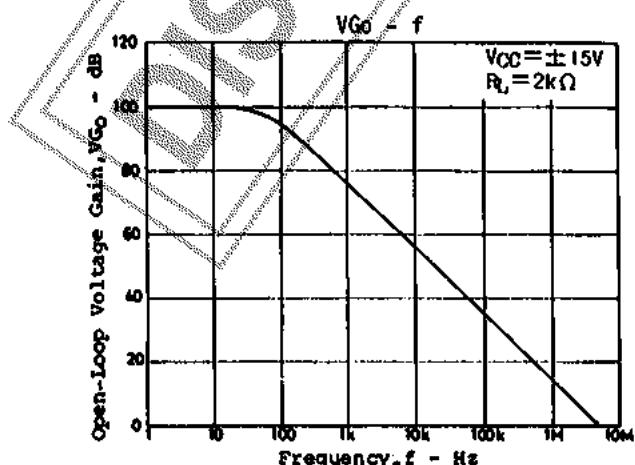
Pin Assignment



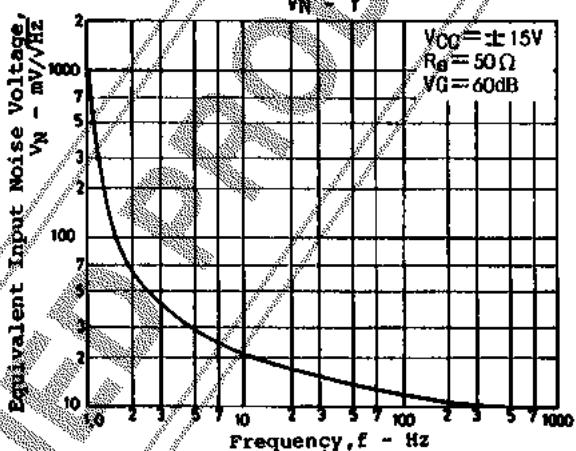
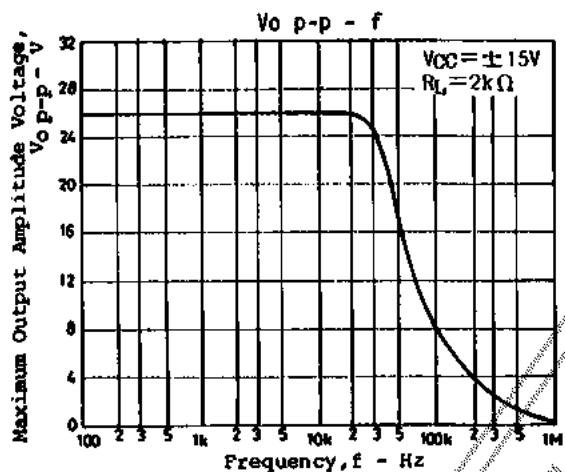
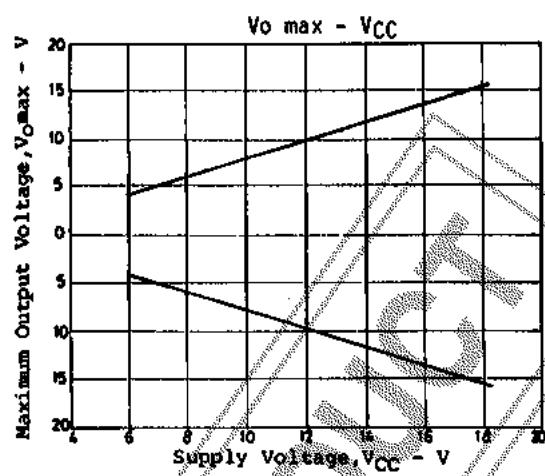
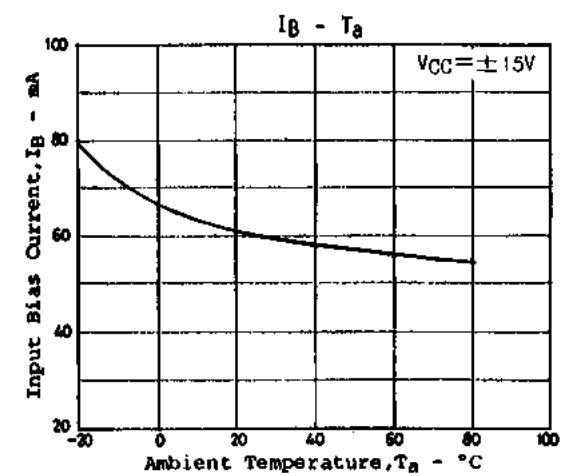
Sample Application Circuit/ RIAA preamplifier (VG=32.5dB)



Unit (resistance: Ω capacitance: F)



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