



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

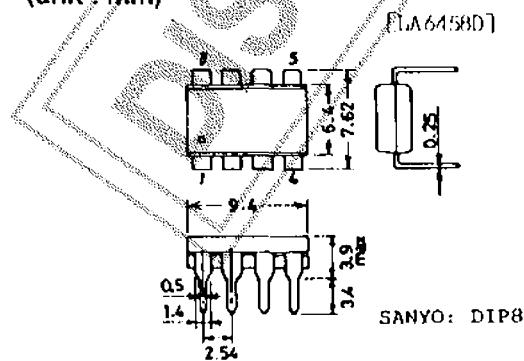
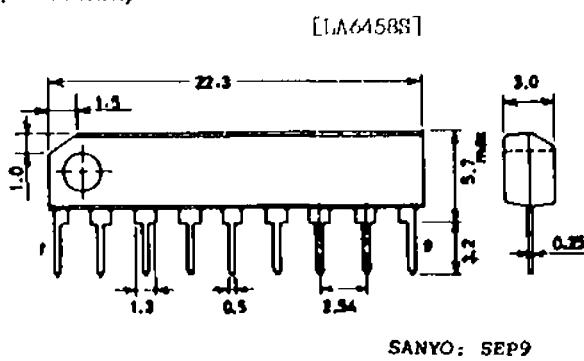
- LA6458D : 8-pin DIP, LA6458S : 9-pin SEP
- On-chip phase compensation circuit.
- High gain, low noise.
- Slew rate : 1.1V/us typ.

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

		unit
Supply Voltage	V_{CC}/V_{EE}	±18 V
Differential Input Voltage	V_{ID}	±30 V
Common-Mode Input Voltage	V_{IN}	±15 V
Allowable Power Dissipation	P_{dmax}	500 mW
	LA6458D	500 mW
	LA6458S	500 mW
Operating Temperature	T_{opr}	-20 to +75 °C
Storage Temperature	T_{stg}	-40 to +125 °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}		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
Slew Rate	SR	$R_L \geq 2\text{kohms}$	±10	±13	V/us
Equivalent Input Noise Voltage	V_{NI}	$V_G=0, R_L \geq 2\text{kohms}$	1.1	1.7	μV
Current Dissipation	I_{CO}	$R_S = 1\text{kohm}, B.P. F = 10\text{Hz to } 30\text{kHz}$	3.5	6	mA
Supply Voltage Rejection	SVR	$R_S \leq 10\text{kohms}$	30	150	μV/V

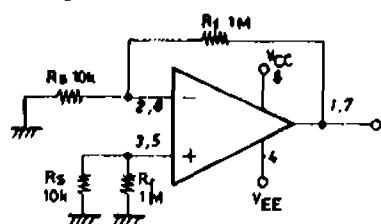
**Package Dimensions 3001B-D8IC
(unit : mm)****Package Dimensions 3017B-S9IC
(unit : mm)**

SANYO Electric Co.,Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

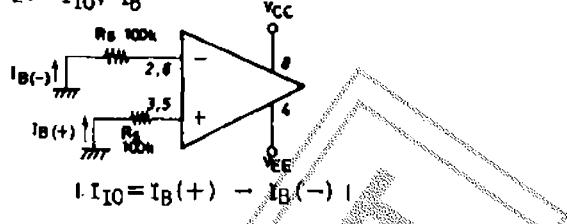
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Test Circuits(Pin assignment: DIP)

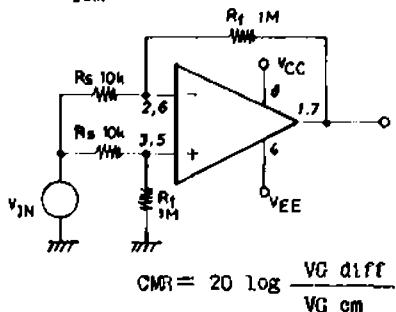
1. V_{IO} , SVR



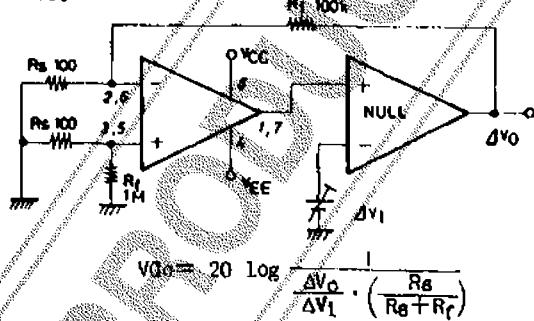
2. I_{IO} , I_B



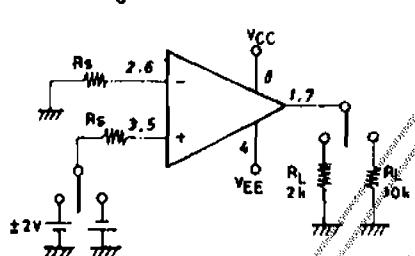
3. V_{ICM} , CMR



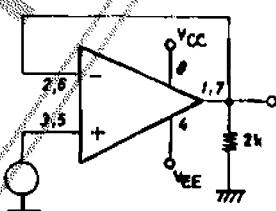
4. V_{IO}



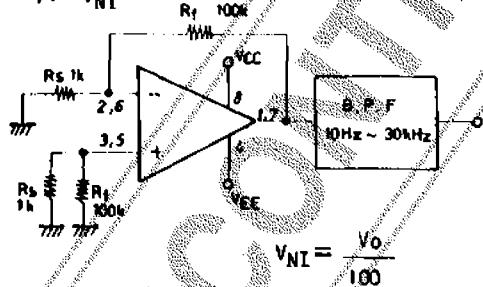
5. V_O



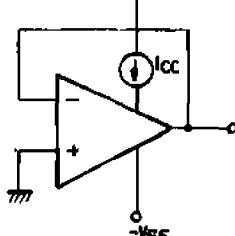
6. SR



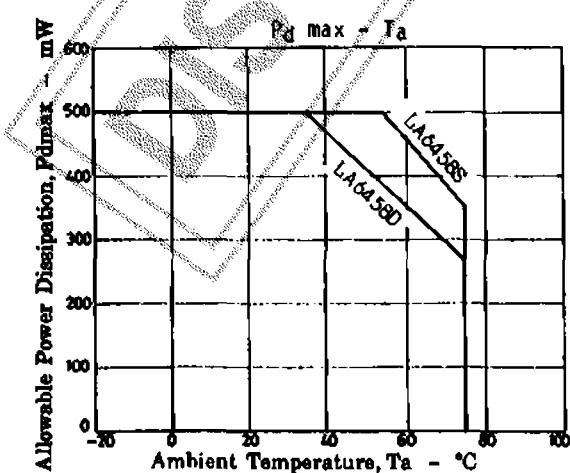
7. V_{NI}



8. I_{CO}

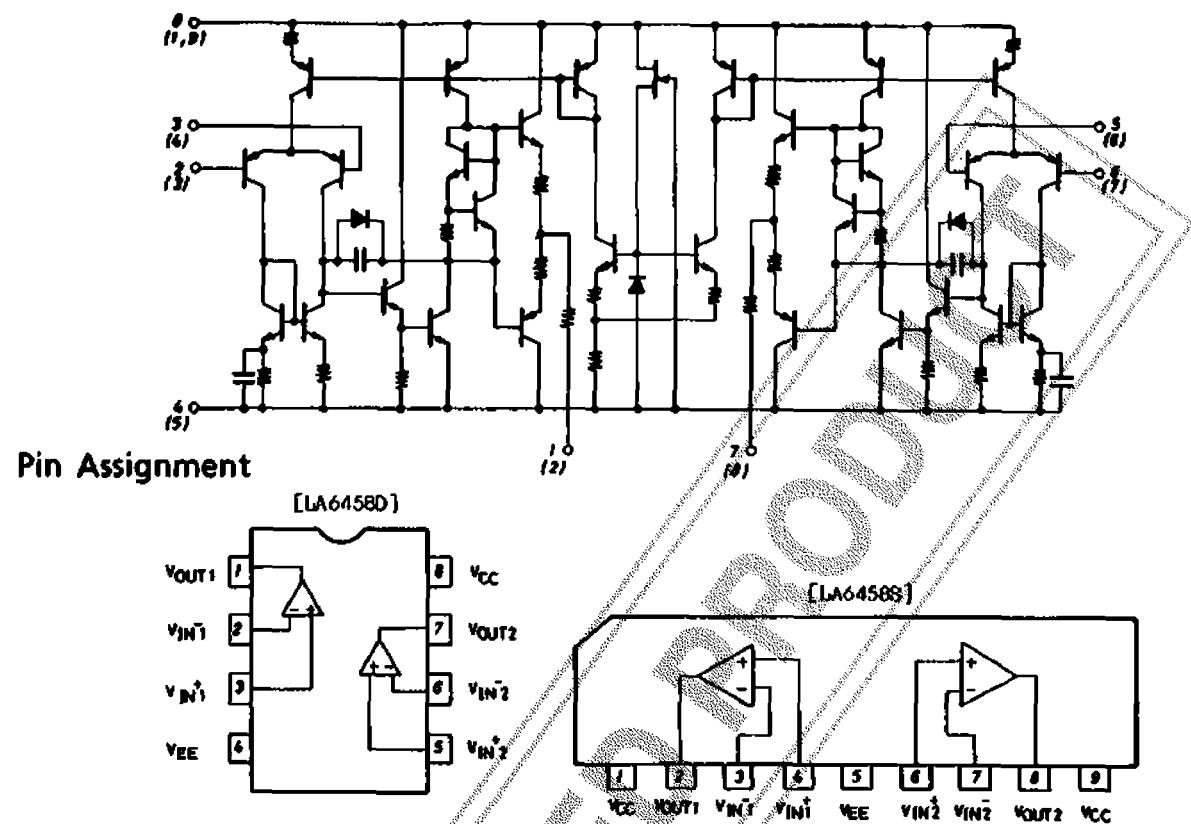


Unit (resistance: Ω)

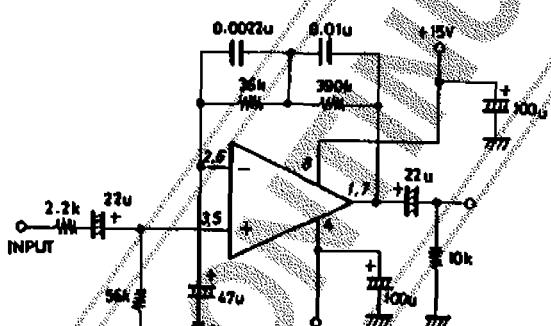


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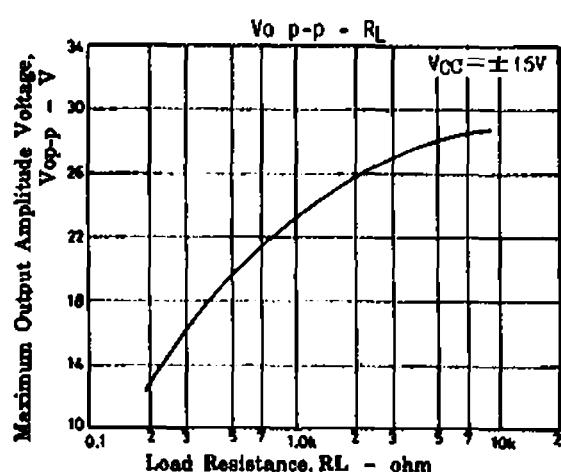
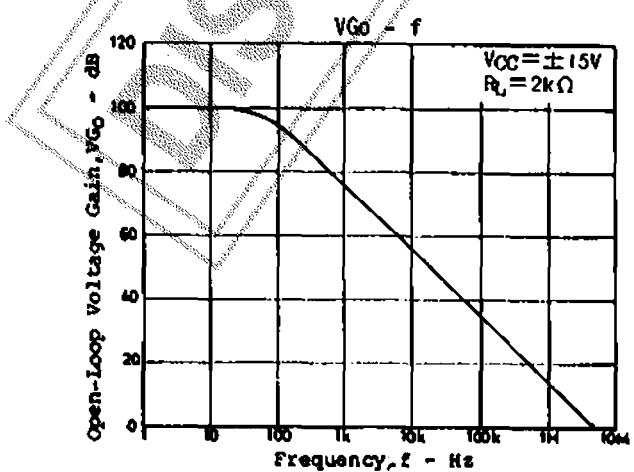
Equivalent Circuit : () of pin No. : LA6458S



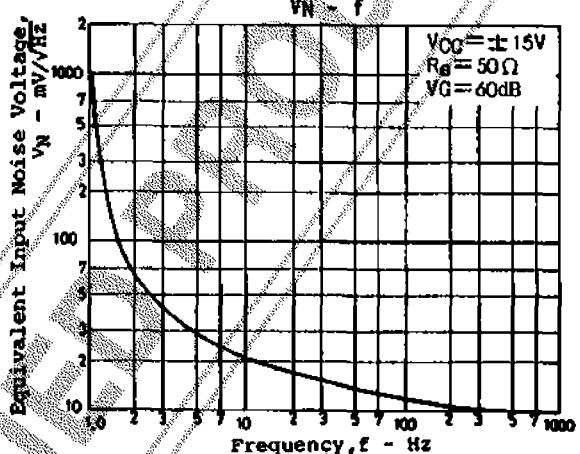
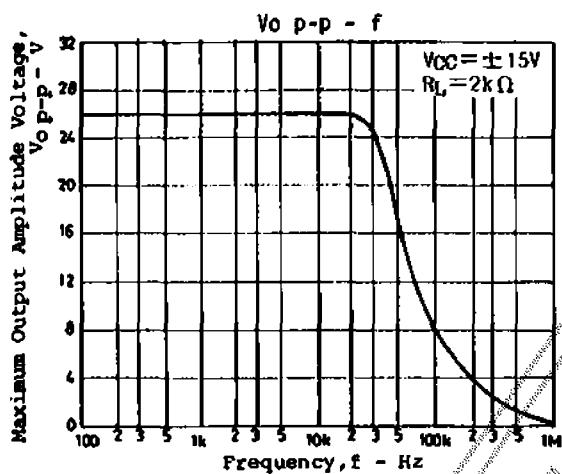
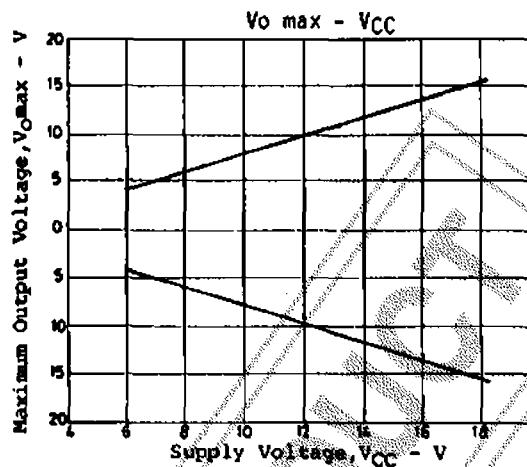
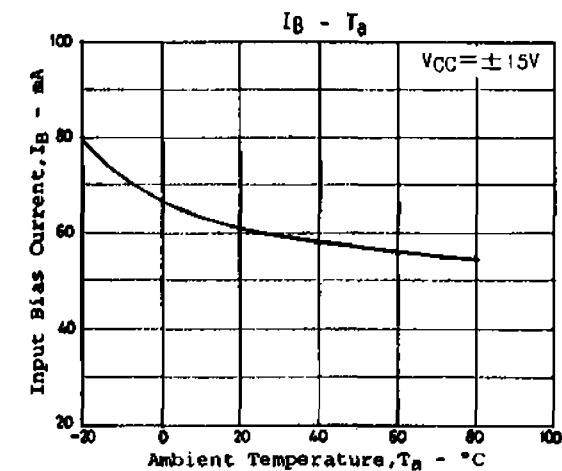
Sample Application Circuit/ RIAA preamplifier (VG=32.5dB)



Unit (resistance: Ω capacitance: F)



LA6458D.6458S



DISCONTINUED