



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**

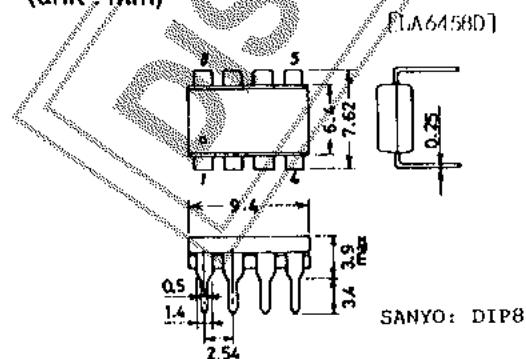
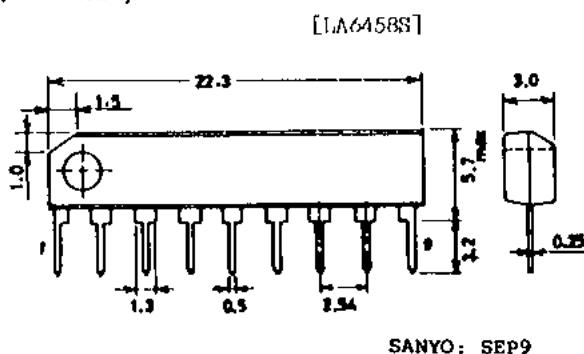
- LA6458D : 8-pin DIP, LA6458S : 9-pin SEP
- On-chip phase compensation circuit.
- High gain, low noise.
- Slew rate : 1.1V/us typ.

**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/μs
Equivalent Input Noise Voltage	$V_{NI}$	$V_G=0, R_L \geq 2\text{kohms}$	1.1		μV
Current Dissipation	$I_{CO}$	$R_S = 1\text{kohm}, B. P. F = 10\text{Hz to } 30\text{kHz}$	1.7		μV
Supply Voltage Rejection	SVR	$R_S \leq 10\text{kohms}$	3.5	6	mA
			30	150	μV/V

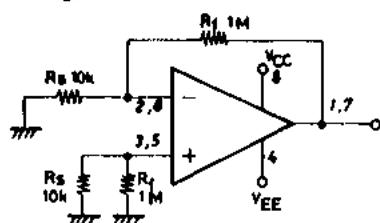
**Package Dimensions 3001B-D8IC  
(unit : mm)****Package Dimensions 3017B-S9IC  
(unit : mm)**

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

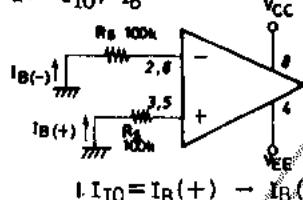
# LA6458D,6458S

## Test Circuits(Pin assignment: DIP)

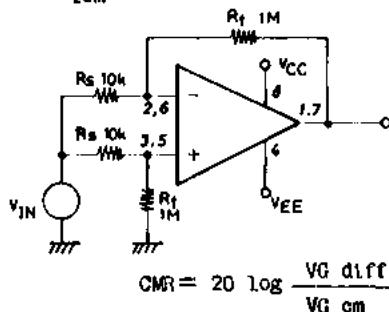
1.  $V_{IO}$ , SVR



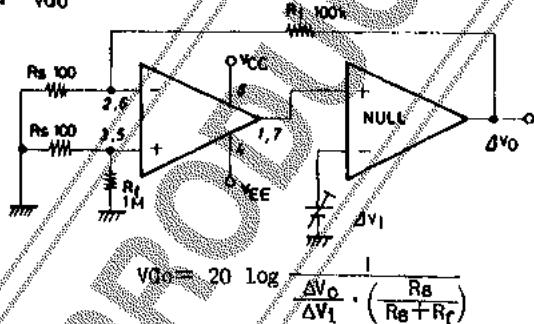
2.  $I_{IO}, I_B$



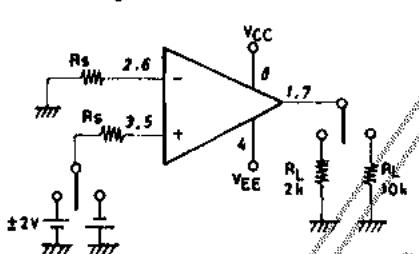
3.  $V_{ICM}, CMR$



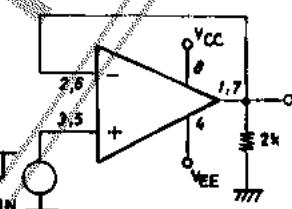
4.  $V_{O0}$



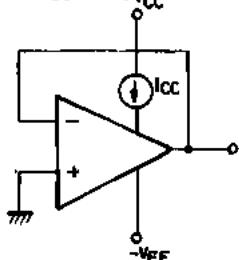
5.  $V_O$



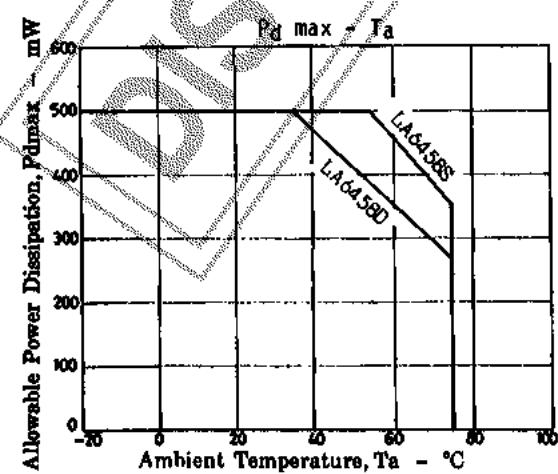
6. SR



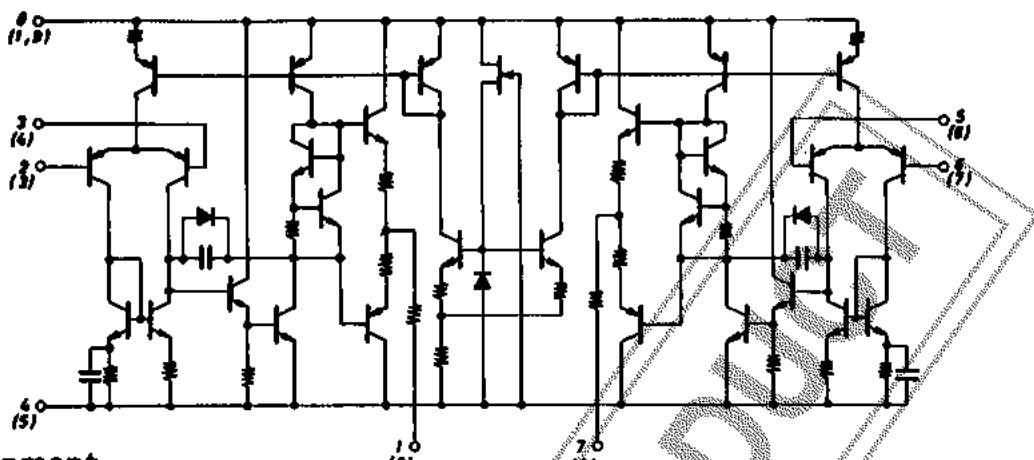
8.  $I_{CO}$



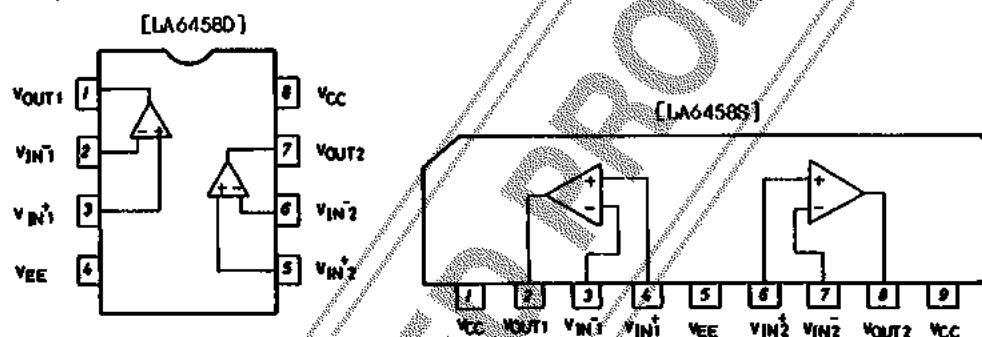
Unit (resistance: $\Omega$ )



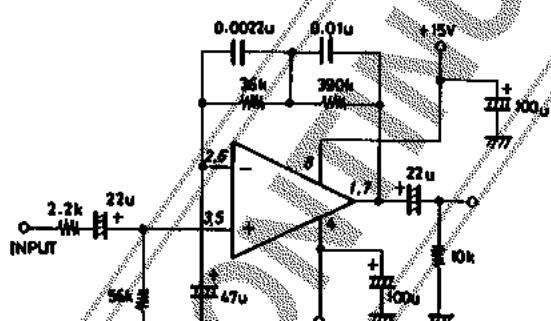
Equivalent Circuit : ( ) of pin No. : LA6458S



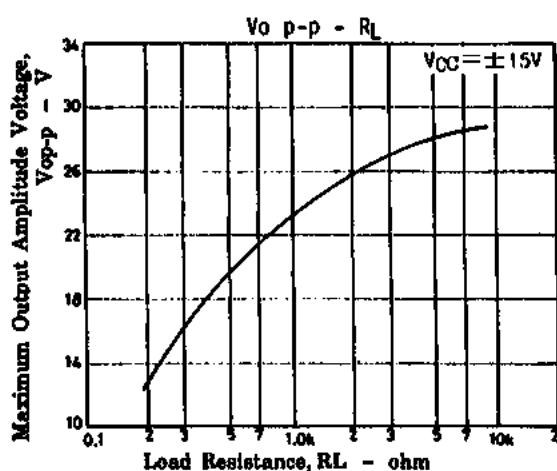
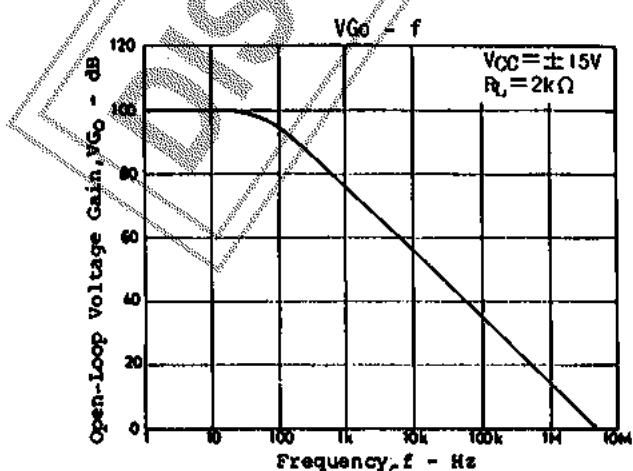
Pin Assignment



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



Unit ( resistance:Ω capacitance:F )



# LA6458D,6458S

