

SANYO

No.2681B

LA4597**2-Channel Power Amp
for Radio-Cassette Recorders****Functions**

- On-chip thermal shutdown circuit
- On-chip standby switch

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

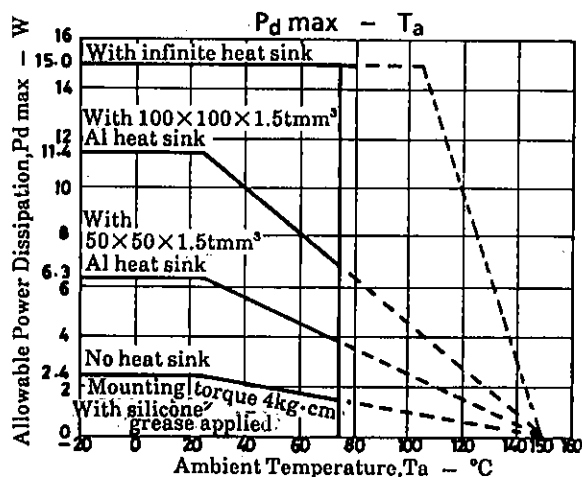
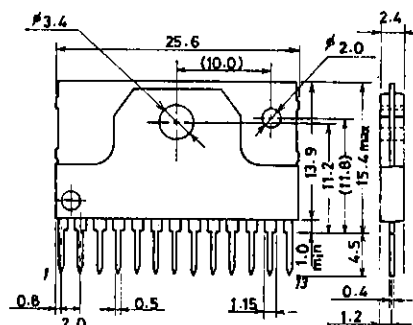
Maximum Supply Voltage	V_{CC} max	18	unit
Allowable Power Dissipation	P_d max	With $100 \times 100 \times 1.5\text{mm}^3$ Al heat sink	11.4 W
Operating Temperature	T_{opr}	-20 to +75	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +150	$^\circ\text{C}$

Operating Conditions at $T_a = 25^\circ\text{C}$

Recommended Supply Voltage	V_{CC}	9, 12	unit
Recommended Load Resistance	R_L	3.2	Ω
Operating Voltage Range	V_{CC} op	4.2 to 16.0	V

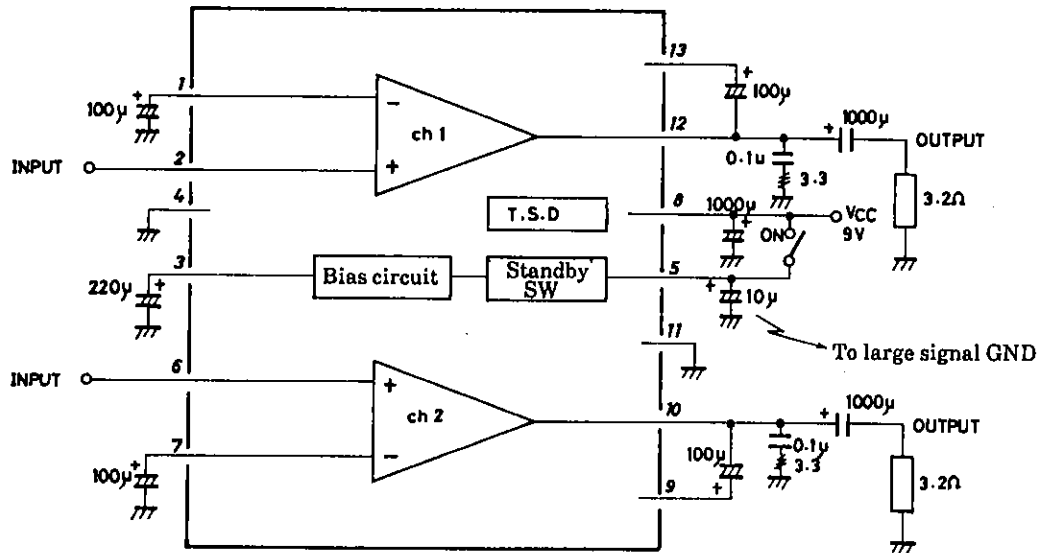
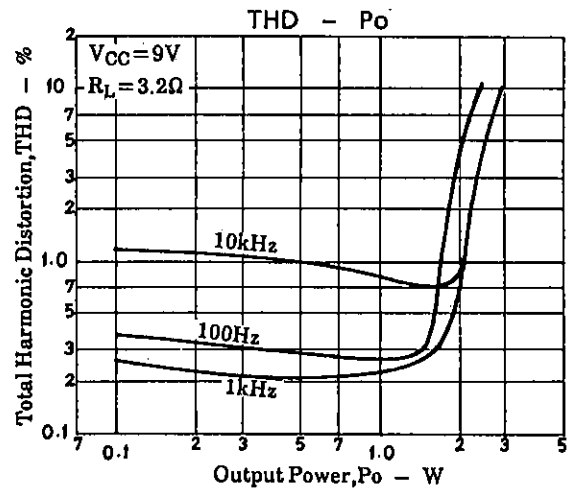
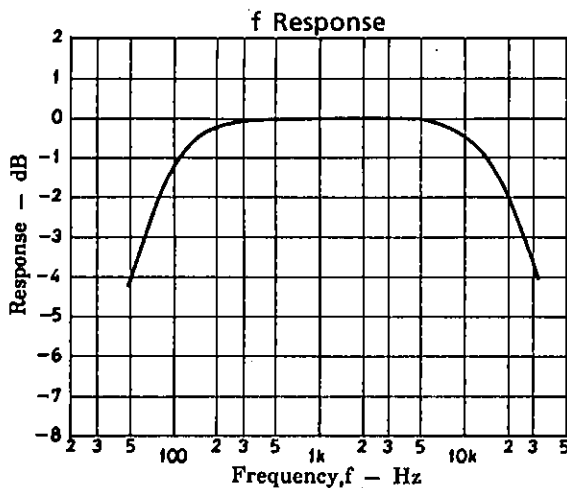
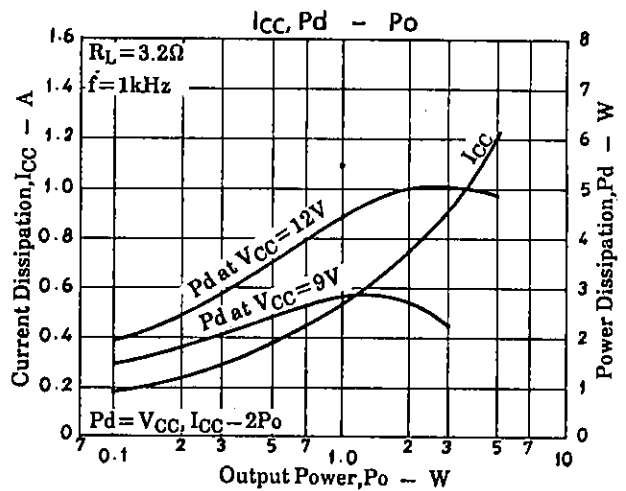
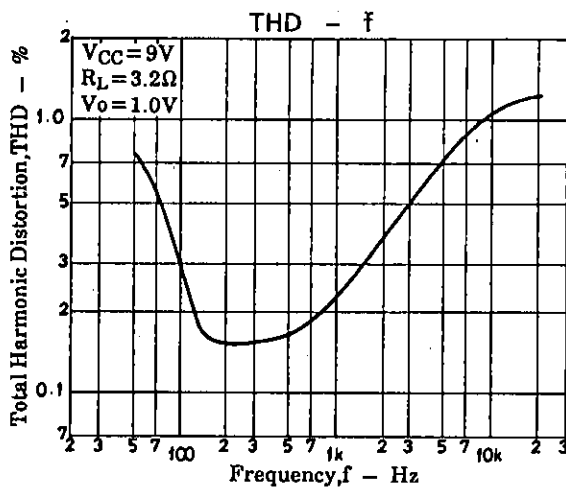
Operating Characteristics at $T_a = 25^\circ\text{C}$, $V_{CC} = 9\text{V}$, $f = 1\text{kHz}$, $R_g = 600\Omega$, $R_L = 3.2\Omega$, $V_G = 50\text{dB}$

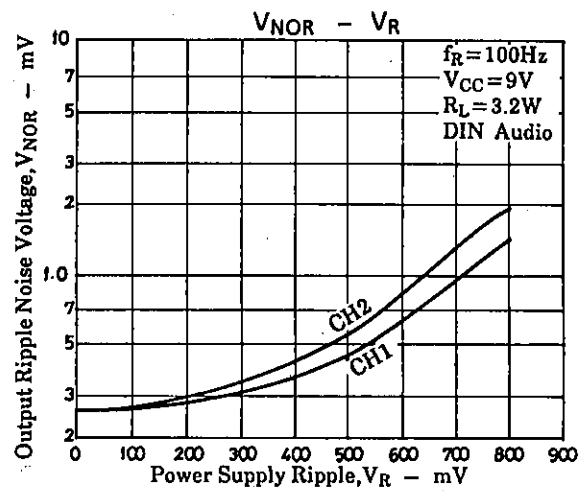
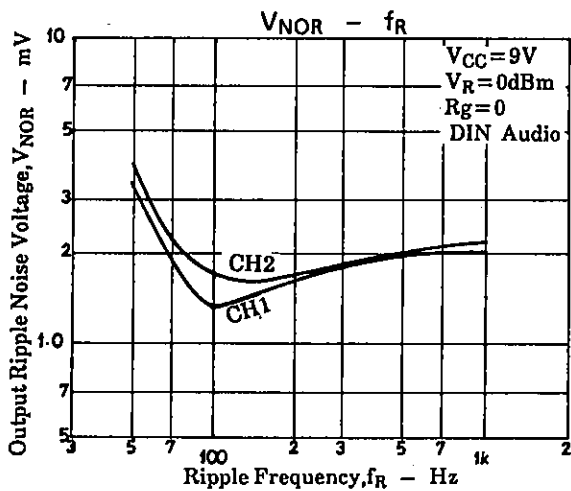
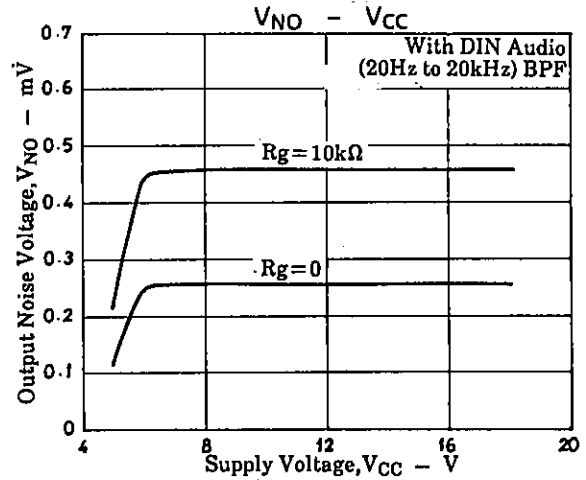
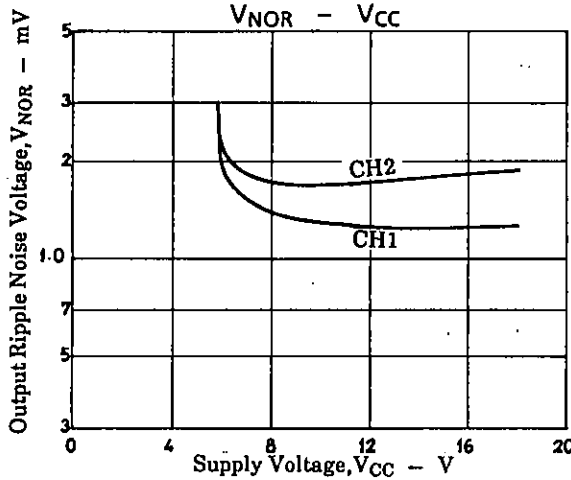
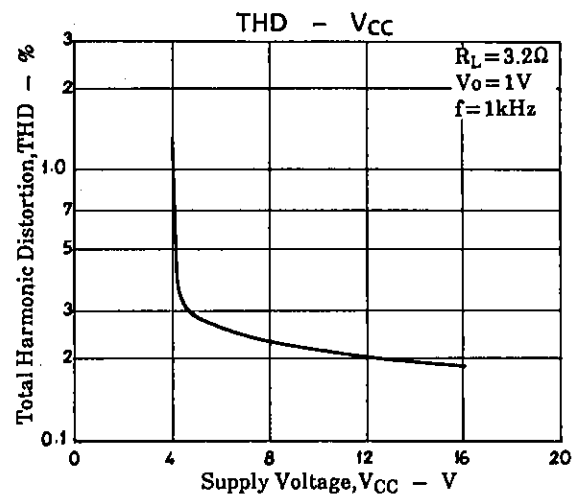
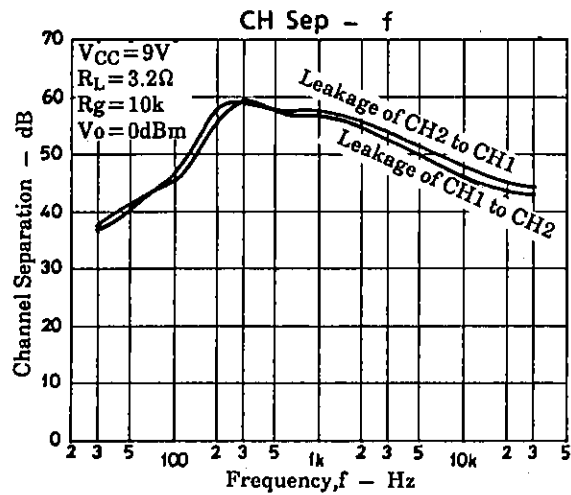
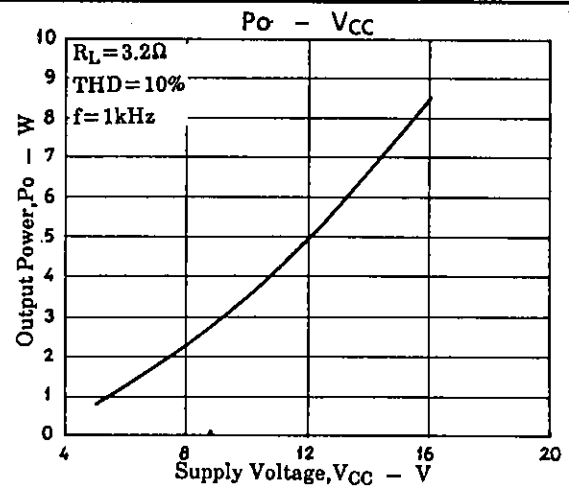
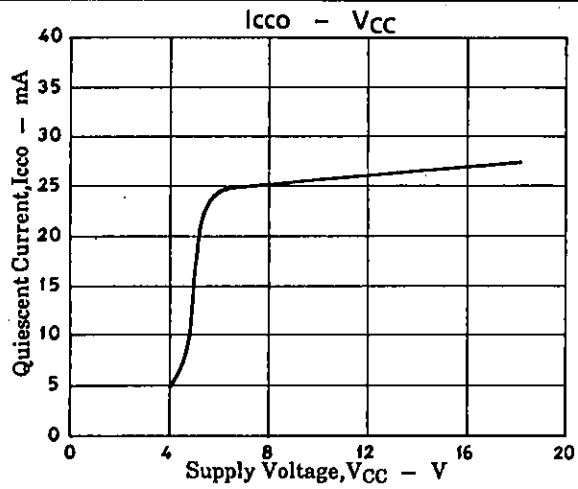
			min	typ	max	unit
Quiescent Current	I_{CCO}		10	20	40	mA
Voltage Gain	V_G		47	49	51	dB
Output Power (1)	P_{O1}	THD = 10%	2.2	2.9		W
Output Power (2)	P_{O2}	THD = 10%, $V_{CC} = 12\text{V}$		4.6		W
Total Harmonic Distortion	THD	$V_o = 2\text{V}$		0.3	1.0	%
Input Resistance	r_i		20	30		$k\Omega$
Output Noise Voltage	V_{NO1}	$R_g = 0$, B.P.F. = 20Hz to 20kHz		0.4	1.0	mV
	V_{NO2}	$R_g = 10k\Omega$, B.P.F. = 20Hz to 20kHz		0.6	2.0	mV
Ripple Rejection	R_r	$R_g = 0$, $f_r = 100\text{Hz}$, $V_{CCR} = 150\text{mV}$	40	50		dB
Channel Separation	CH Sep	$R_g = 10k\Omega$, $V_o = 0\text{dB}$	45	55		dB
Standby Current	I_{sd}				10	μA

**Package Dimensions
(unit: mm)
3107**

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Test Circuit and External Constants

Unit (resistance: Ω , capacitance: F)





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