



No.1443A

LA2500

Monolithic Linear IC

PSEUDO CLASS A BIAS CIRCUIT FOR POWER AMP**Features**

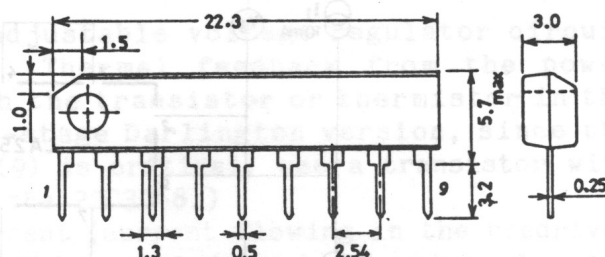
- Incorporating the LA2500 in a pure complementary class B power amp permits this amp to be changed to a pseudo class A power amp easily.
- The power transistors in the pseudo class A power amp are not cut off, resulting in considerable reduction in switching distortion and crossover distortion.
- Applicable to 2-stage/3-stage Darlington power amp.

Maximum Ratings at Ta=25°C

			unit
Maximum Supply Voltage	V_{CCmax}	15	V
Allowable Power Dissipation	P_{dmax}	540	mW
Operating Temperature	T_{opg}	-25 to +90	°C
Storage Temperature	T_{stg}	-55 to +125	°C

Operating Characteristics at Ta=25°C, $V_1=8V, I_1=I_2=10mA$

			min	typ	max	unit
Output Voltage 1	$V_3(1V)$	$V_2=7V, Fig.1$	0.63	0.76	0.91	V
	$V_3(2V)$	$V_2=6V, Fig.1$	0.77	0.88	1.05	V
	$V_3(3V)$	$V_2=5V, Fig.1$	1.46	1.72	1.93	V
	$V_3(5V)$	$V_2=3V, Fig.1$	3.21	3.61	4.03	V
$V_3(5)-V_3(3)$	ΔV_3		1.74	1.89	2.06	
Output Voltage 2	$V_4(1V)$	$V_2=1V, Fig.1$	0.60	0.73	0.88	V
	$V_4(2V)$	$V_2=2V, Fig.1$	0.75	0.88	1.02	V
	$V_4(3V)$	$V_2=3V, Fig.1$	1.49	1.76	2.04	V
	$V_4(5V)$	$V_2=5V, Fig.1$	3.34	3.72	4.11	V
$V_4(5)-V_4(3)$	ΔV_4		1.80	1.98	2.15	
Diode	$V_F(1V)$	$V_2=4V, Fig.1$	0.59	0.67	0.75	V
	$V_F(2V)$	$V_2=4V, Fig.1$	0.61	0.69	0.77	V
Output Voltage 3	$V_3(1.15V)$	$V_1=4V, V_2=2.85V, Fig.2$	0.50	0.76	1.0	V
Output Voltage 4	$V_4(1.15V)$	$V_1=4V, V_2=1.15V, Fig.2$	0.50	0.75	1.0	V
$V_3(1.15V)+V_4(1.15V)$	$\Sigma V(1.15V)$		1.0	1.51	1.66	V
Leakage across Pins 1 and 5	V_{1-5}	$I_{1 \text{ to } 5 \text{ pin}}=25\mu A$	2.0			V

Case Outline 3017B-S9IC
(unit:mm)

SANYO: SEP9

Information furnished by SANYO is believed to be accurate and reliable. However, no responsibility is assumed by SANYO for its use; nor for any infringements of patents or other rights of third parties which may result from its use, and no license is granted by implication or otherwise under any patent or patent rights of SANYO.

These specifications are subject to change without notice.

TOKYO SANYO ELECTRIC CO., LTD. SEMICONDUCTOR DIVISION
15-13, 6-CHOME, SOTOKANDA, CHIYODA-KU, TOKYO 101 JAPAN

4255MW, TS No.1443-1/5