



No.1443A

LA2500

Monolithic Linear IC

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

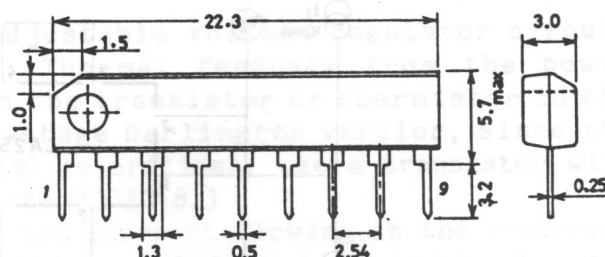
- Incorporating the LA2500 in a pure complementary class B power amp permits this amp to be changed to a pseudo class A power amp easily.
- The power transistors in the pseudo class A power amp are not cut off, resulting in considerable reduction in switching distortion and crossover distortion.
- Applicable 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 to 5 pin=25uA	2.0			V

Case Outline 3017B-S9IC
(unit:mm)

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4255MW, TS No.1443-1/5