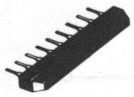
No.1443A

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.

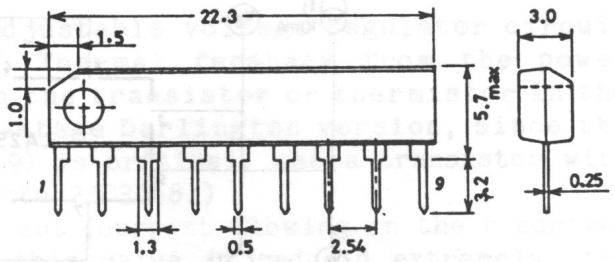
Maximum Ratings at Ta=25°C

			unit
Maximum Supply Voltage	V_{CC}max	15	V
Allowable Power Dissipation	Pdmax	540	mW
Operating Temperature	Topg	-25 to +90	°C
Storage Temperature	Tstg	-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	V3(1V)	V2=7V,Fig.1	0.63	0.76	0.91	V
	V3(2V)	V2=6V,Fig.1	0.77	0.88	1.05	V
	V3(3V)	V2=5V,Fig.1	1.46	1.72	1.93	V
	V3(5V)	V2=3V,Fig.1	3.21	3.61	4.03	V
V3(5)-V3(3)	⊿V3		1.74	1.89	2.06	
Output Voltage 2	V4(1V)	V2=1V,Fig.1	0.60	0.73	0.88	V
	V4(2V)	V2=2V,Fig.1	0.75	0.88	1.02	V
	V4(3V)	V2=3V,Fig.1	1.49	1.76	2.04	V
	V4(5V)	V2=5V,Fig.1	3.34	3.72	4.11	V
V4(5)-V4(3)	⊿V4		1.80	1.98	2.15	
Diode	VF(1V)	V2=4V,Fig.1	0.59	0.67	0.75	V
	VF(2V)	V2=4V,Fig.1	0.61	0.69	0.77	V
Output Voltage 3	V3(1.15V)	V1=4V,V2=2.85V,Fig.2	0.50	0.76	1.0	V
Output Voltage 4	V4(1.15V)	V1=4V,V2=1.15V,Fig.2	0.50	0.75	1.0	V
V3(1.15V)+V4(1.15V)	ΣV(1.15V)		1.0	1.51	1.66	V
Leakage across Pins 1 and 5	V1-5	I1 to 5 pin=25uA	2.0			V

Case Outline 3017B-S9IC
(unit:mm)



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