

Monolithic Linear IC

LA6524

SANYO

4-output Power Driver

Overview

The LA6524 is a 4-output power driver developed for use in consumer and industrial equipment.

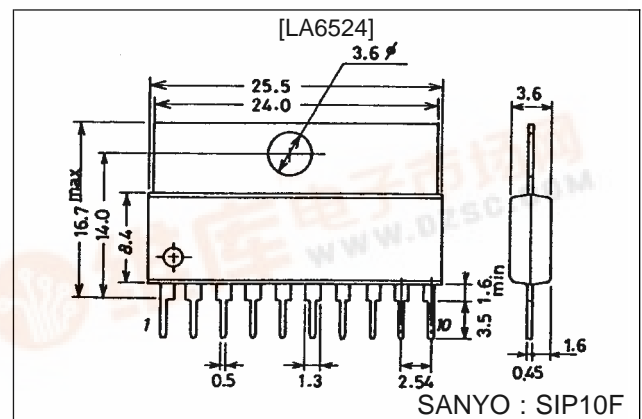
Functions

- Four buffer amp circuits on chip
- High output current ($I_o \text{ max} = 0.5 \text{ A}$)
- Includes current limiter
- Broad operating voltage range (± 2 to $+12 \text{ V}$)
- Single power supply operation possible (4 to 24 V)
- Thermal shutdown circuit built-in.

Package Dimensions

unit : mm

3046B-SIP10F



Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V_{CC}/V_{EE}		± 15	V
Input voltage	V_{IN}		± 14	V
Allowable power dissipation	$P_d \text{ max}$	When using Al heat sink ($50 \times 50 \times 1.5 \text{ mm}^3$)	2.0	W
Operating temperature	T_{opr}		-20 to $+75$	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to $+125$	$^\circ\text{C}$

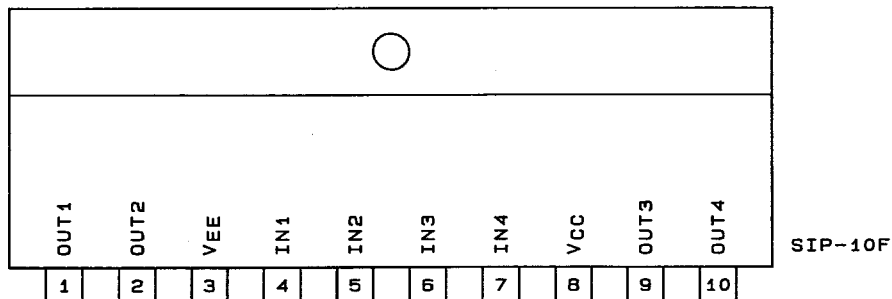
Operating Characteristics at $T_a = 25 \text{ }^\circ\text{C}$, $V_{CC}/V_{EE} = \pm 10 \text{ V}$

Parameter	Symbol	Conditions	min	typ	max	Unit
Current drain with no load	I_{CC}			10	30	mA
Input offset voltage	V_{IO}	$R_S \leq 10 \text{ k}\Omega$		2	7	mV
Input bias current	I_B			50	500	nA
Input voltage range	V_{ID}		-9		$+8$	V
Maximum output voltage	V_O	$R_L = 33 \Omega$		± 8		V
Slew rate	SR	$R_L = 33 \Omega$, $R_1 = 2.2 \Omega$, $C_1 = 0.1 \mu\text{F}$		0.15		V/ μs
Limiter current (built-in type)	I_{SC}			0.5		A



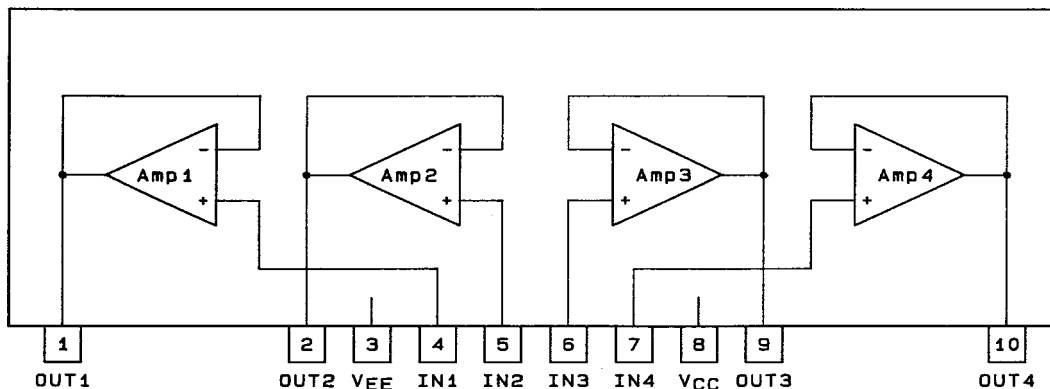
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Pin Assignments



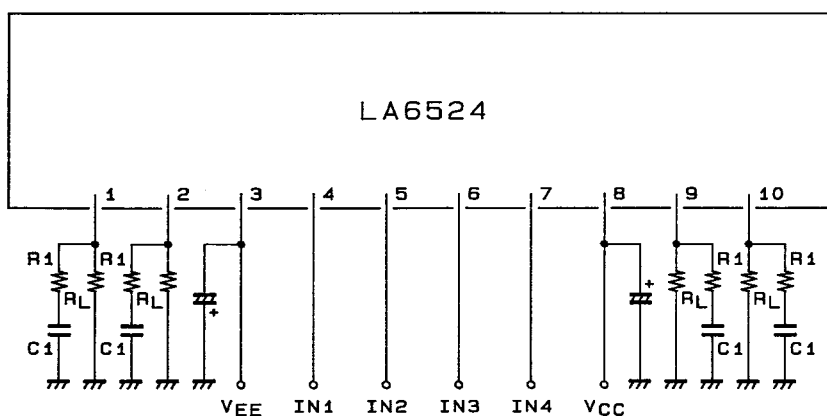
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Block Diagram



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Sample Application Circuit



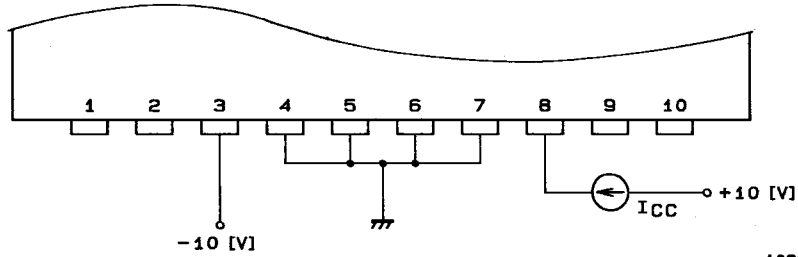
$R_L =$ Load
 $R_1 = 2.2[\Omega]$
 $C_1 = 0.1[\mu F]$ (Film)

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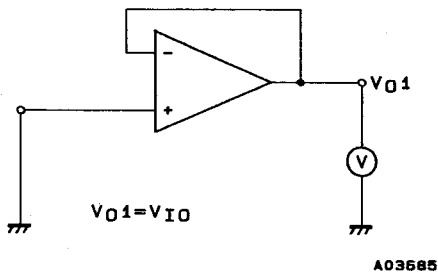
Test Circuit

1. I_{CC}



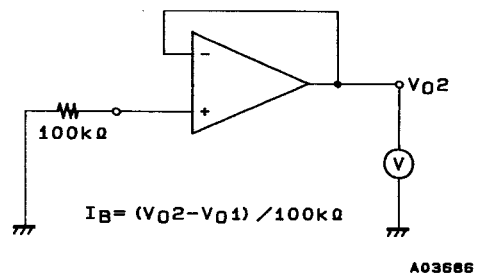
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2. V_{IO}



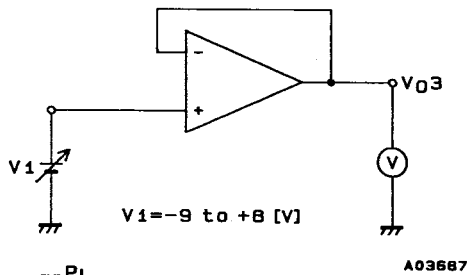
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3. I_B



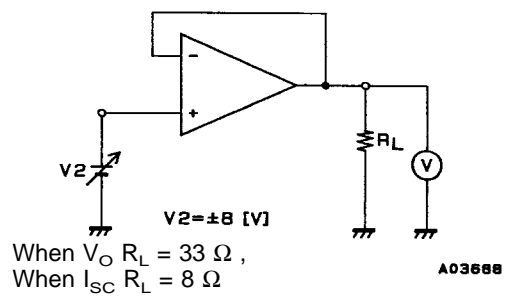
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4. V_{ID}



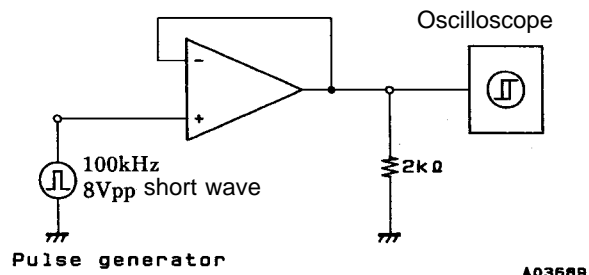
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5. V_O, I_{SC}

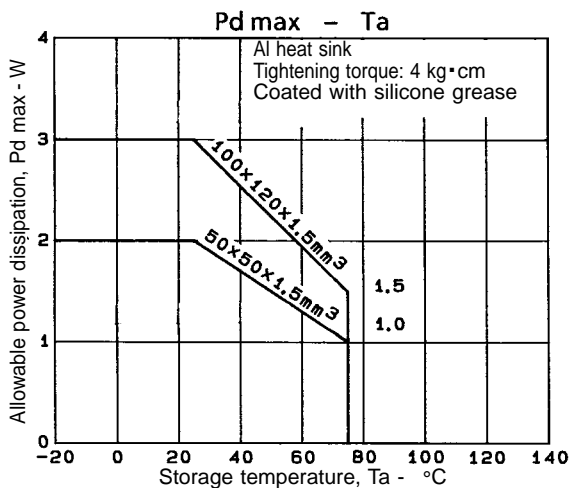


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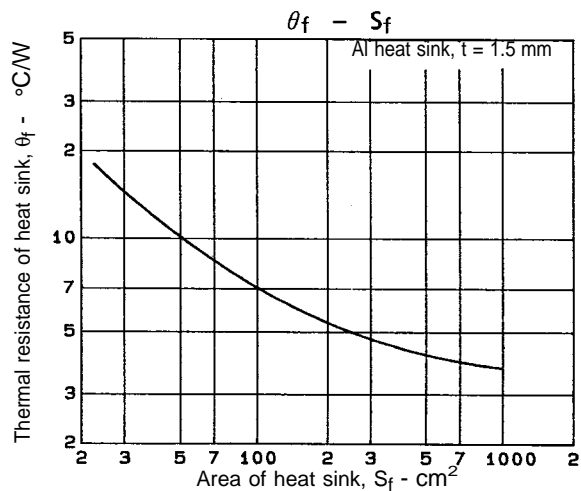
6. SR^{PI}



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