



LA6524

## 4-output Power Driver

## Overview

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

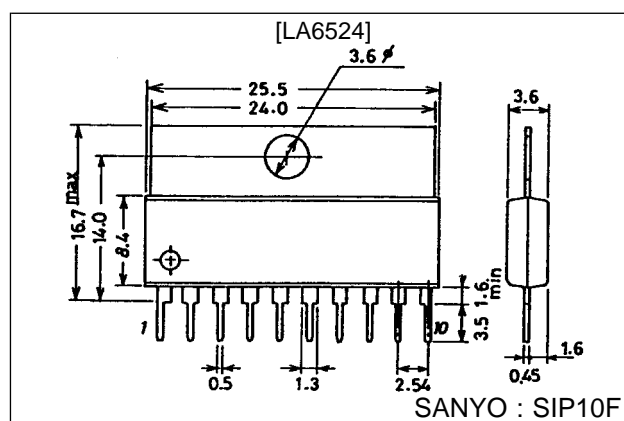
## Functions

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

## Package Dimensions

unit : mm

3046B-SIP10F



## Specifications

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

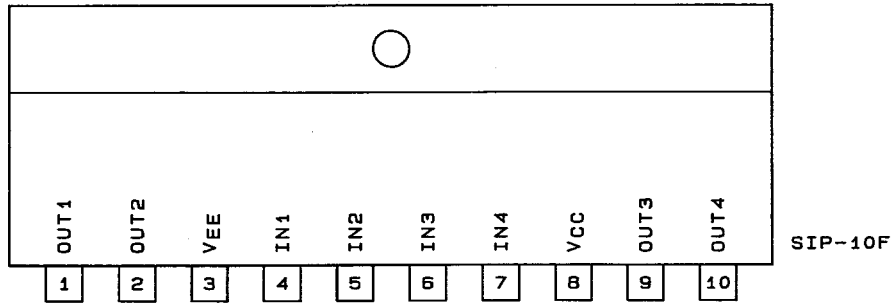
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC}/V_{EE}$		$\pm 15$	V
Input voltage	$V_{IN}$		$\pm 14$	V
Allowable power dissipation	$P_d \text{ max}$	When using Al heat sink ( $50 \times 50 \times 1.5 \text{ mm}^3$ )	2.0	W
Operating temperature	$T_{op}$		$-20$ to $+75$	$^\circ\text{C}$
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	$V_O$	$R_L = 33 \text{ }\Omega$		$\pm 8$		V
Slew rate	SR	$R_L = 33 \text{ }\Omega$ , $R_1 = 2.2 \text{ }\Omega$ , $C_1 = 0.1 \text{ }\mu\text{F}$		0.15		V/ $\mu\text{s}$
Limiter current (built-in type)	$I_{SC}$			0.5		A

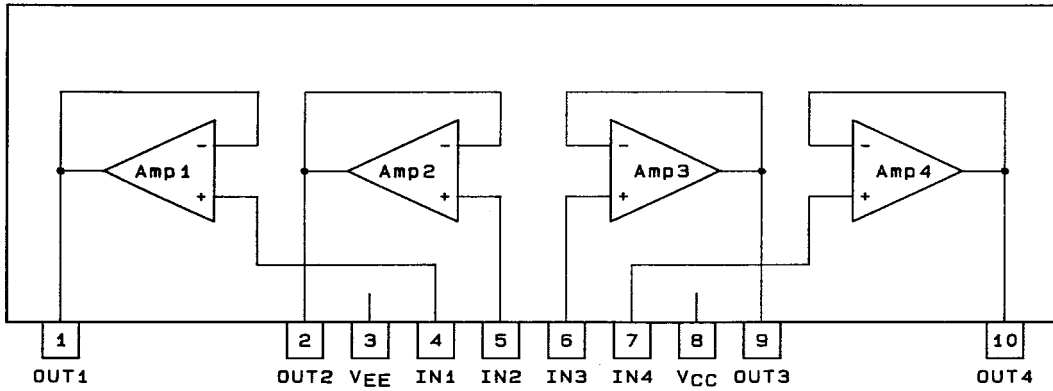
# LA6524

## Pin Assignments



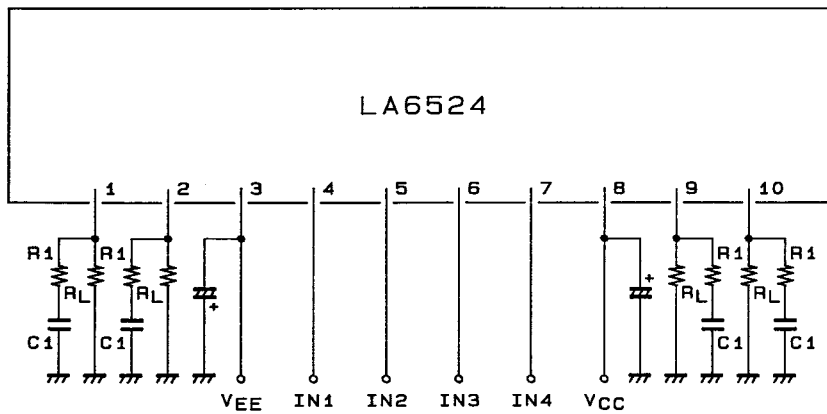
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## Block Diagram



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## Sample Application Circuit

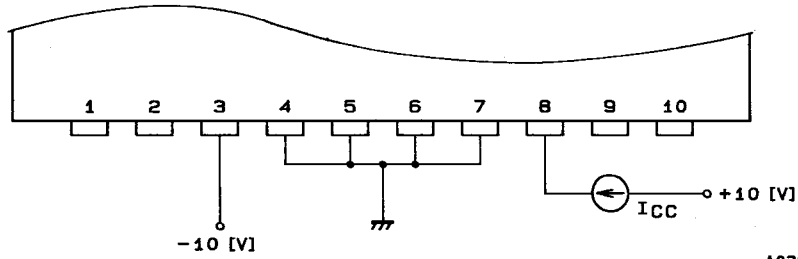


$R_L =$  Load  
 $R_1 = 2.2[\Omega]$   
 $C_1 = 0.1[\mu F]$  (Film)

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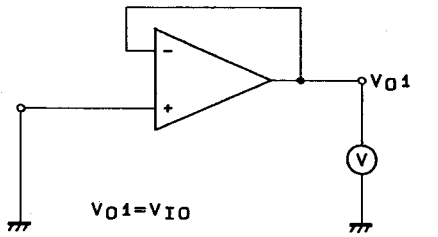
Test Circuit

1.  $I_{CC}$



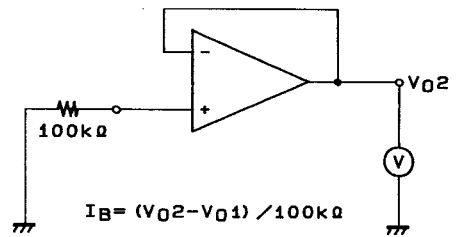
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2.  $V_{IO}$



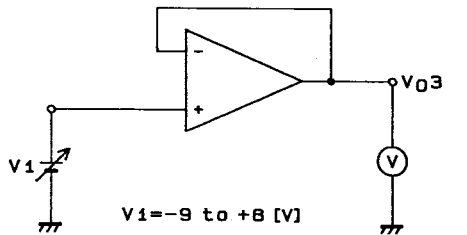
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3.  $I_B$



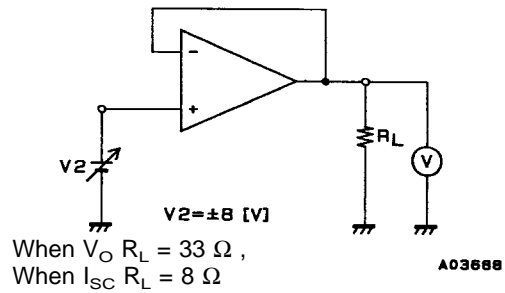
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4.  $V_{ID}$



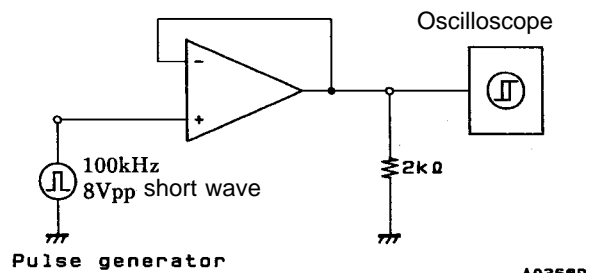
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5.  $V_O, I_{SC}$

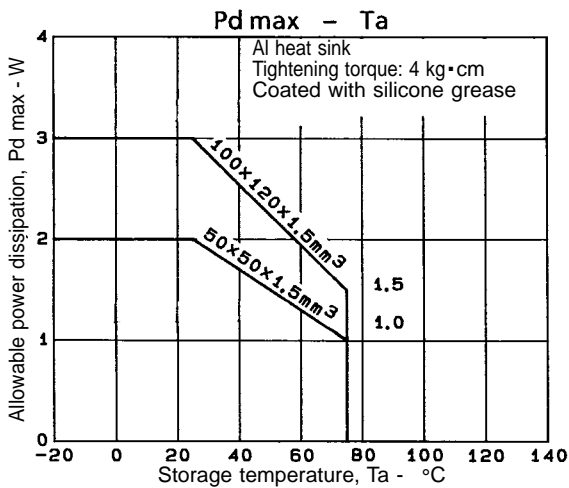


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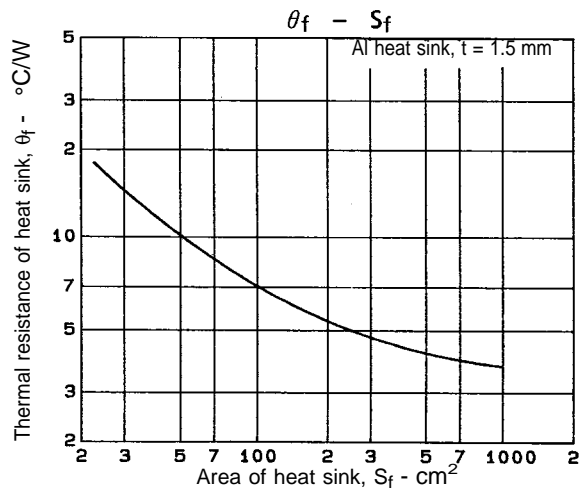
6.  $SR^{P_i}$



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