



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 max = 0.5 A)
- Includes current limiter
- Broad operating voltage range (± 2 to +12 V)
- Single power supply operation possible (4 to 24 V)
- Thermal shutdown circuit built-in.

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 max	When using Al heat sink (50 x 50 x 1.5 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

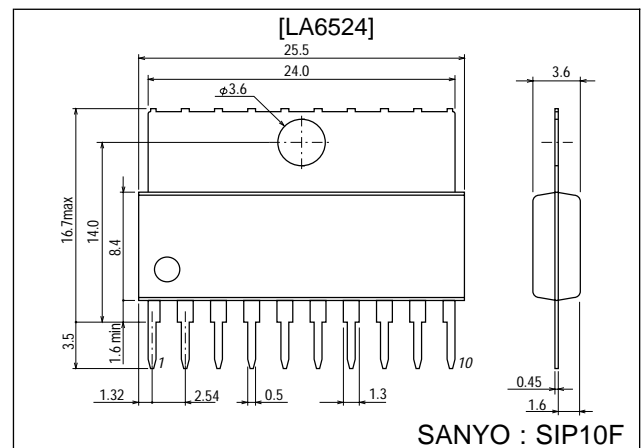
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Package Dimensions

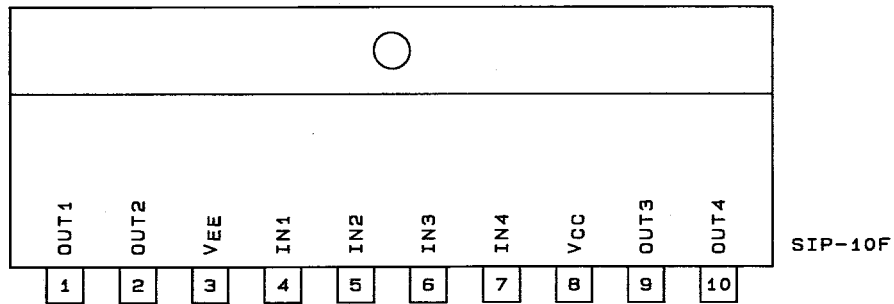
unit : mm

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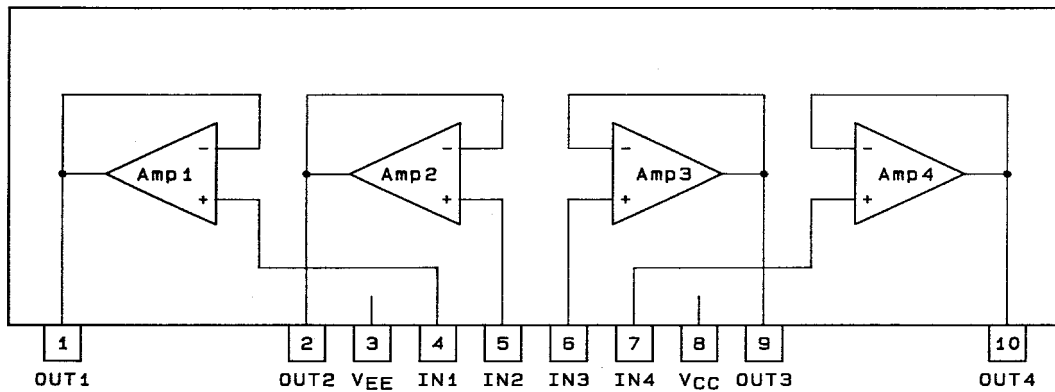
LA6524

Pin Assignment



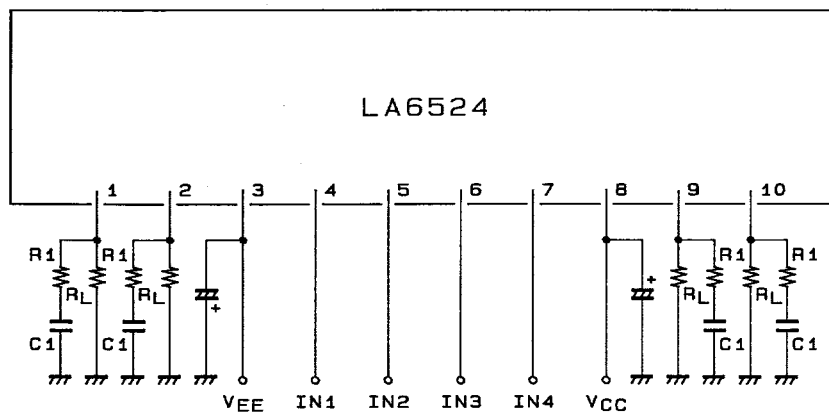
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Block Diagram



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Sample Application Circuit

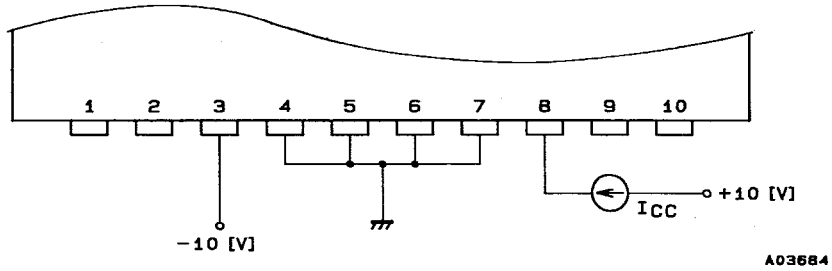


$R_L = \text{Load}$
 $R_1 = 2.2[\Omega]$
 $C_1 = 0.1[\mu\text{F}] \text{ (Film)}$

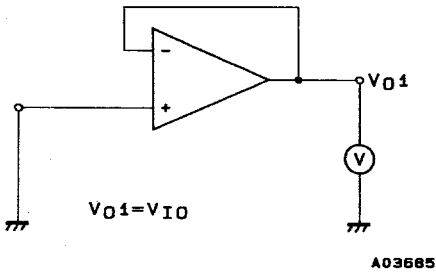
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Test Circuit

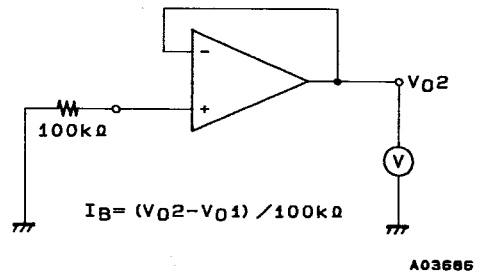
1. I_{CC}



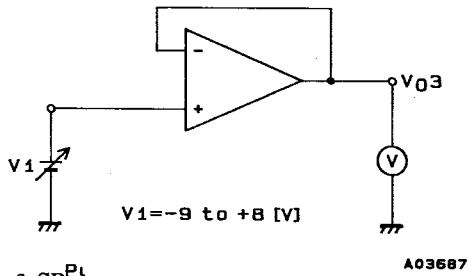
2. V_{IO}



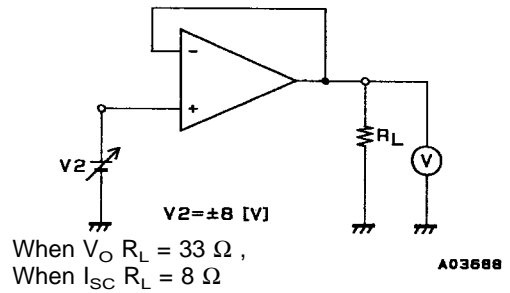
3. I_B



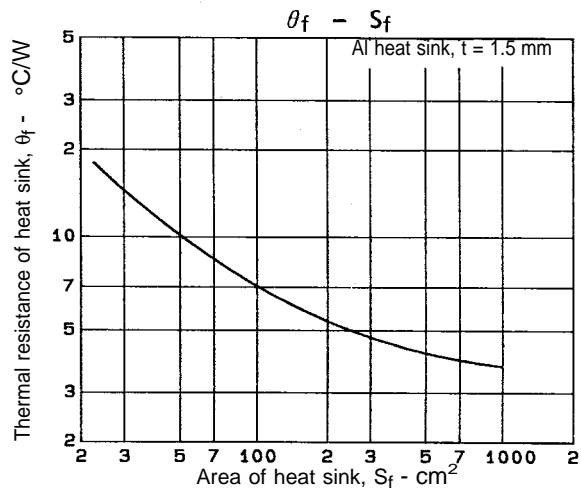
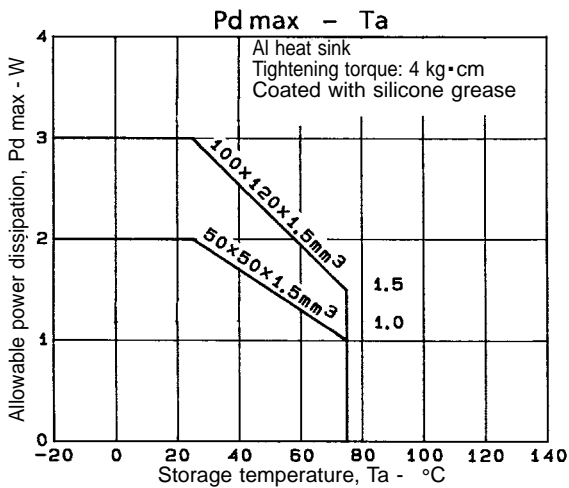
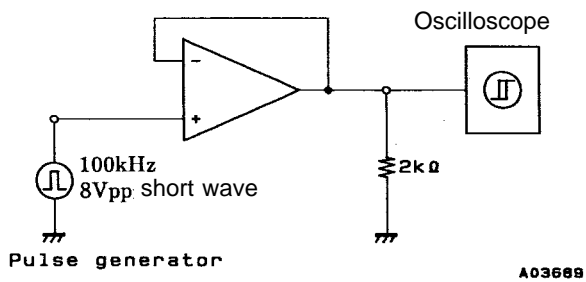
4. V_{ID}



5. V_O, I_{SC}



6. SR^{PI}



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