

HIGH SPEED DUAL COMPARATORS

- TWO INDEPENDENT COMPARATORS
- OPERATES FROM A SINGLE +5V SUPPLY
- TYPICALLY 80ns RESPONSE TIME AT $\pm 15V$
- MINIMUM FAN-OUT OF 2 EACH SIDE
- MAXIMUM INPUT CURRENT OF $1\mu A$ OVER OPERATING TEMPERATURE RANGE
- INPUTS AND OUTPUTS CAN BE ISOLATED FROM SYSTEM GROUND
- HIGH COMMON-MODE SLEW RATE

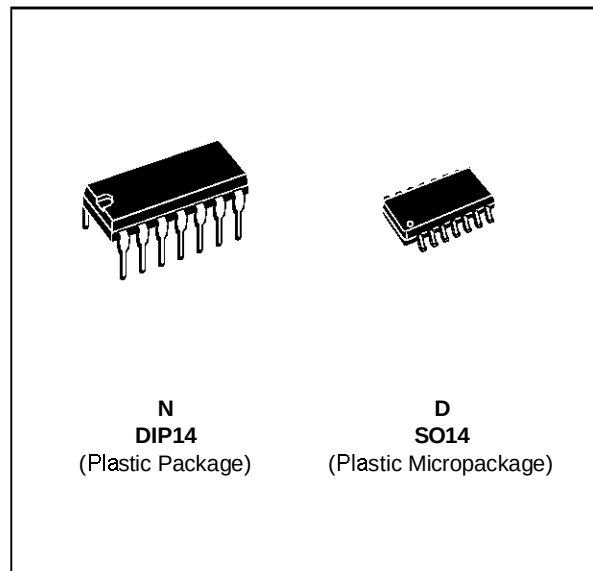
DESCRIPTION

These products are precision high speed dual comparators designed to operate over a wide range of supply voltages down to a single 5V logic supply and ground and have low input currents and high gains.

The open collector of the output stage makes compatible with TTL as well as capable of driving lamps and relays at currents up to 25mA.

Although designed primarily for applications requiring operation from digital logic supplies, are fully specified for power supplies up to $\pm 15V$.

They feature faster response than the LM111 at the expense of higher power dissipation. However, the high speed, wide operating voltage range and low package count make them much more versatile.

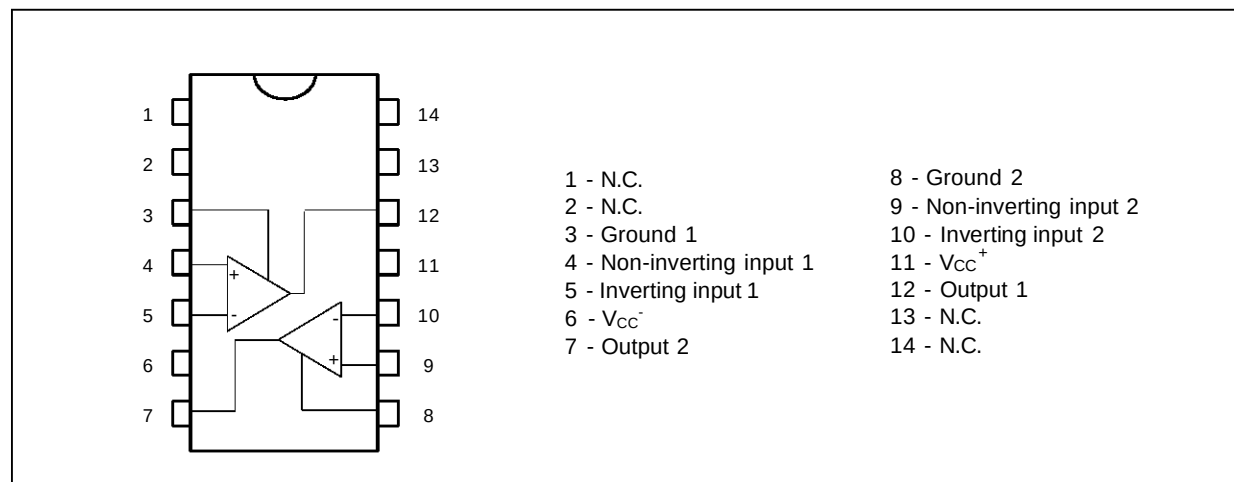


ORDER CODES

Part Number	Temperature Range	Package	
		N	D
LM119	-55, +125°C	•	•
LM219	-40, +105°C	•	•
LM319	0, +70°C	•	•

Example : LM219N

PIN CONNECTIONS (top view)



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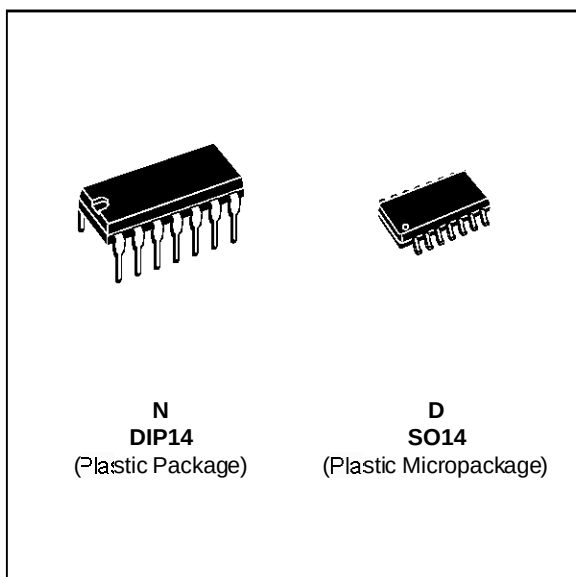
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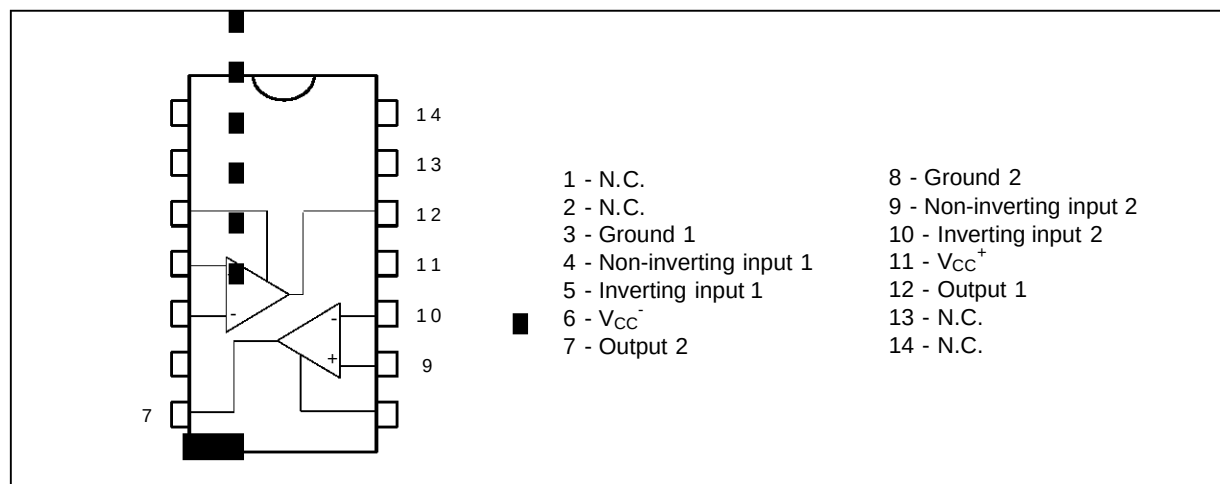


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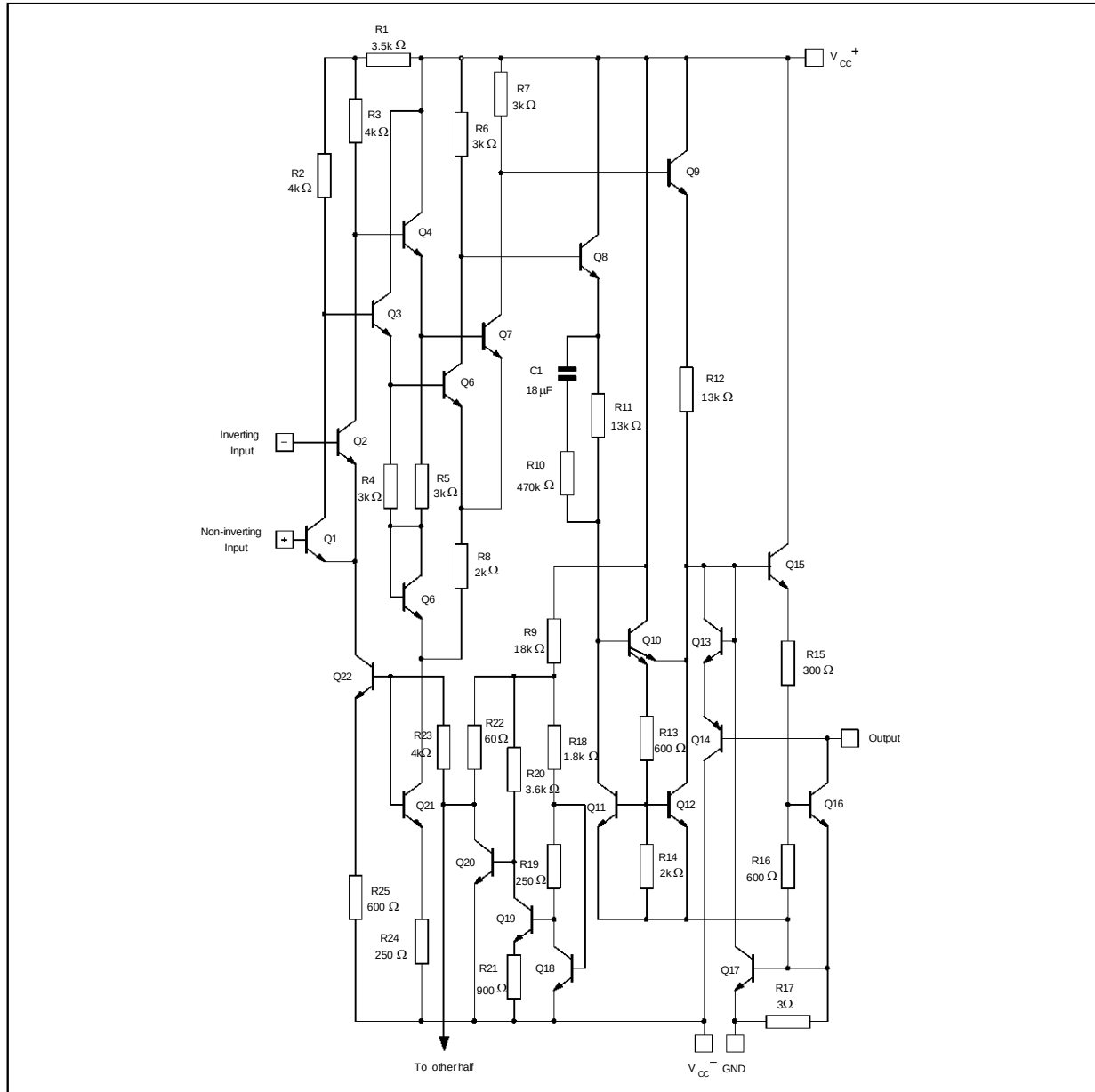
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SCHEMATIC DIAGRAM

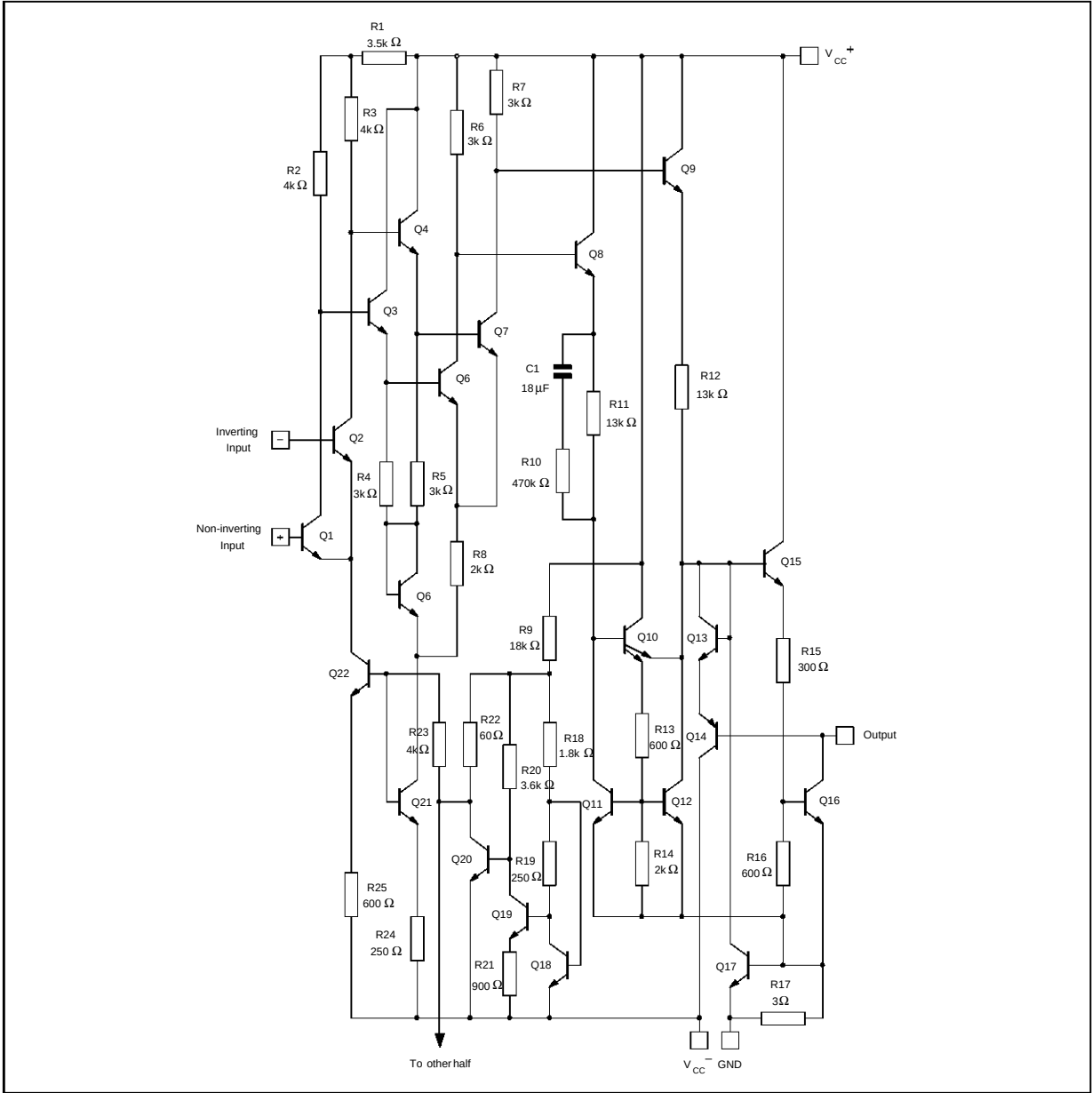


ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	LM119	LM219	LM319	Unit
$V_O - V_{CC}^-$	Output to Negative Supply Voltage	36	36	36	V
V_{CC}^-	Negative Supply Voltage	25	25	25	V
V_{CC}^+	Positive Supply Voltage	18	18	18	V
V_{id}	Differential Input Voltage	± 5	± 5	± 5	V
V_i	Input Voltage – (note 1)	± 15	± 15	± 15	V
P_{tot}	Power Dissipation	500	500	500	mW
T_{oper}	Operating Free-air Temperature Range	-55 to +125	-40 to +105	0 to +70	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65 to +150	-65 to +150	-65 to +150	$^{\circ}\text{C}$

LM119 - LM219 - LM319

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