

Signetics

Integrated Circuits – Comparators

NE527 Series – Voltage Comparator

GENERAL DESCRIPTION

The SE/NE527 is a high speed analog voltage comparator which, in the first time mates state-of-the-art Schottky diode technology with the conventional linear process. This allows simultaneous fabrication of high speed T^2L gates with a precision linear amplifier on a single monolithic chip. The SE/NE527 is similar in design to the Signetics SE/NE529 voltage comparator except that it incorporates a "Emitter Follower" input stage for extremely low input currents. This opens the door to a whole new range of applications for analog voltage comparators.

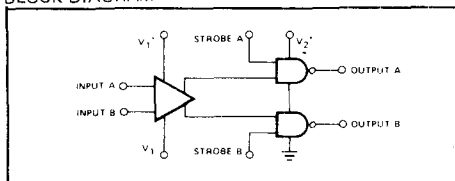
FEATURES

- 15ns propagation delay
- Complementary output gates
- TTL or ECL compatible outputs
- Wide common mode and differential voltage range
- Mil std 883A, B, C available

APPLICATIONS

- A/D conversion
- ECL to TTL interface
- TTL to ECL interface
- Memory sensing
- Optical data coupling

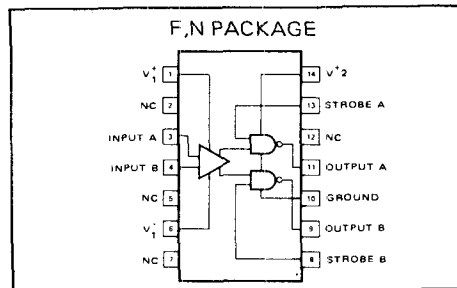
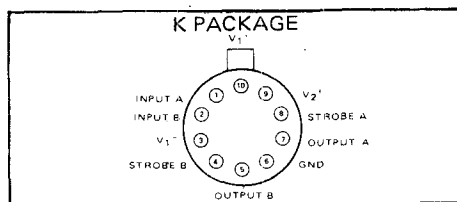
BLOCK DIAGRAM



REFERENCE TABLE

TYPE NO.	STOCK NO.	OUTLINE DRWG. NO.
NE527K	56009A	9
NE527N	56010D	1
SE527K	56011B	9

CONNECTION DIAGRAM

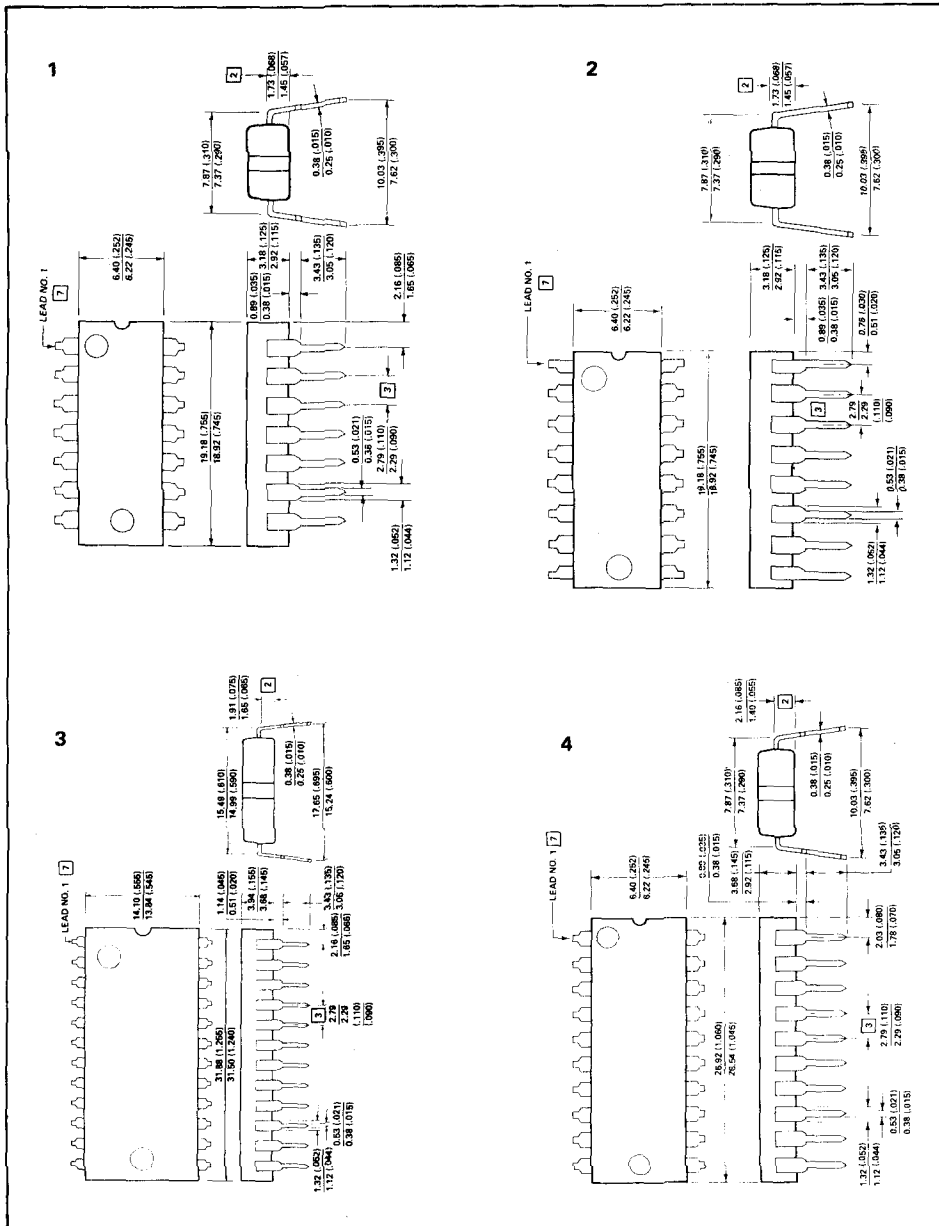


MAXIMUM RATINGS

PARAMETER	RATING	UNIT
Positive supply voltage ($V1+$)	+15	V
Negative supply voltage ($V1-$)	-15	V
Gate supply voltage ($V2+$)	+7	V
Output voltage	+15	V
Differential input voltage	± 5	V
Input common mode voltage	± 6	V
Power dissipation	600	mW
Operating temperature range		
NE527	0 to +70	$^{\circ}C$
SE527	-55 to +125	$^{\circ}C$
Storage temperature range	-65 to +150	$^{\circ}C$
Lead temperature (soldering, 60sec)	+300	$^{\circ}C$

ITT GEMINI

FOR CURRENT PRICES PHONE
HARLOW (0279) 29644

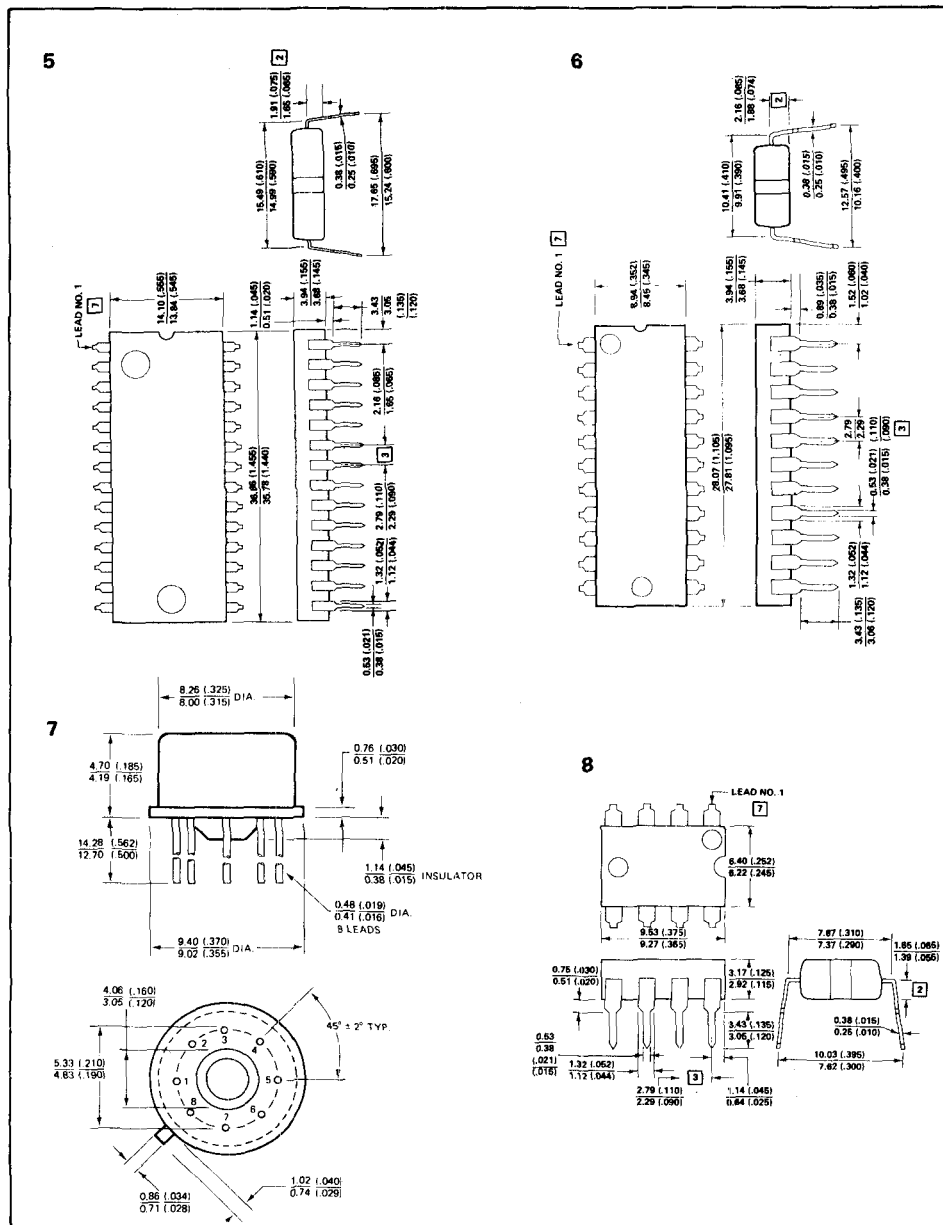


PLEASE QUOTE STOCK NO.
AND MANUFACTURERS PART NO. WHEN ORDERING

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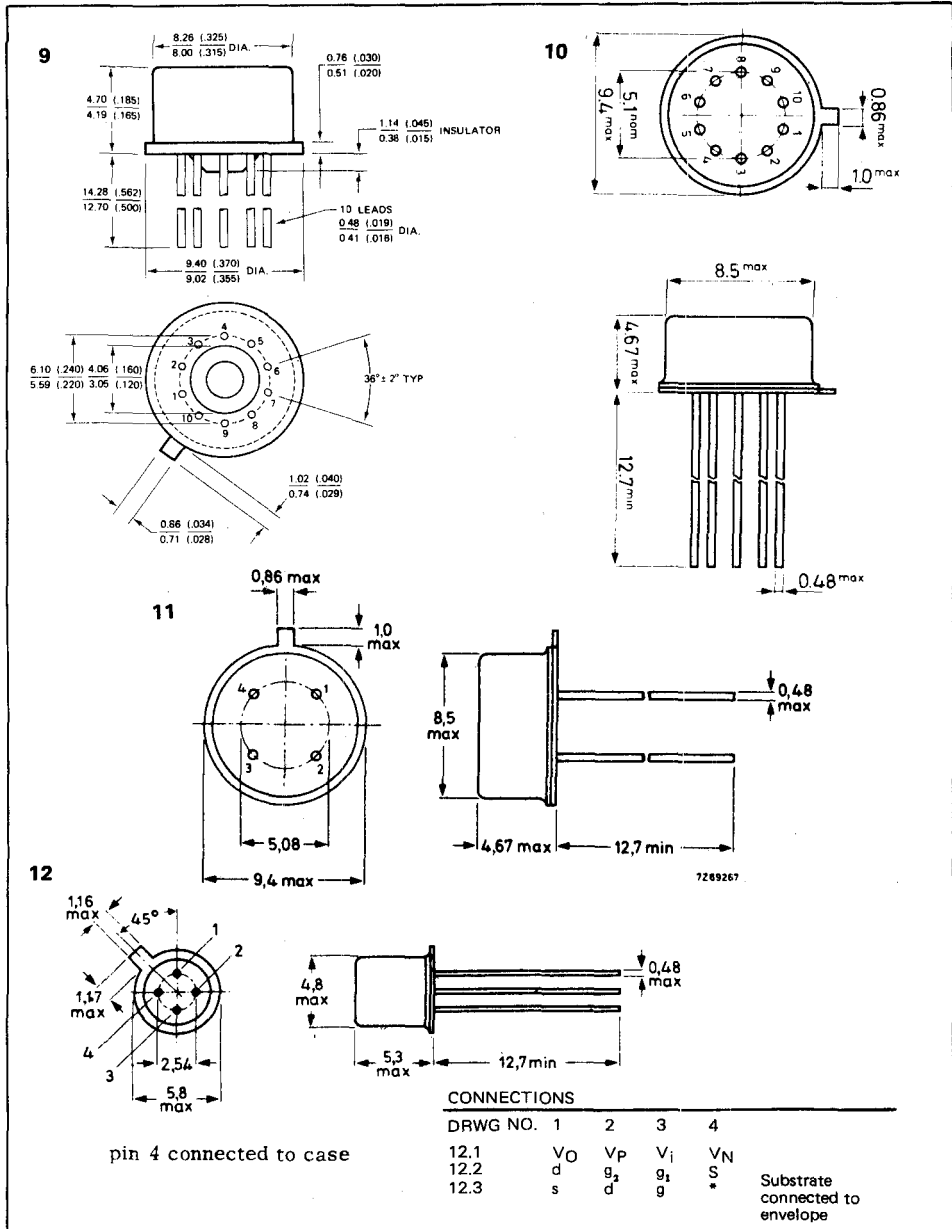
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Outline Drawings



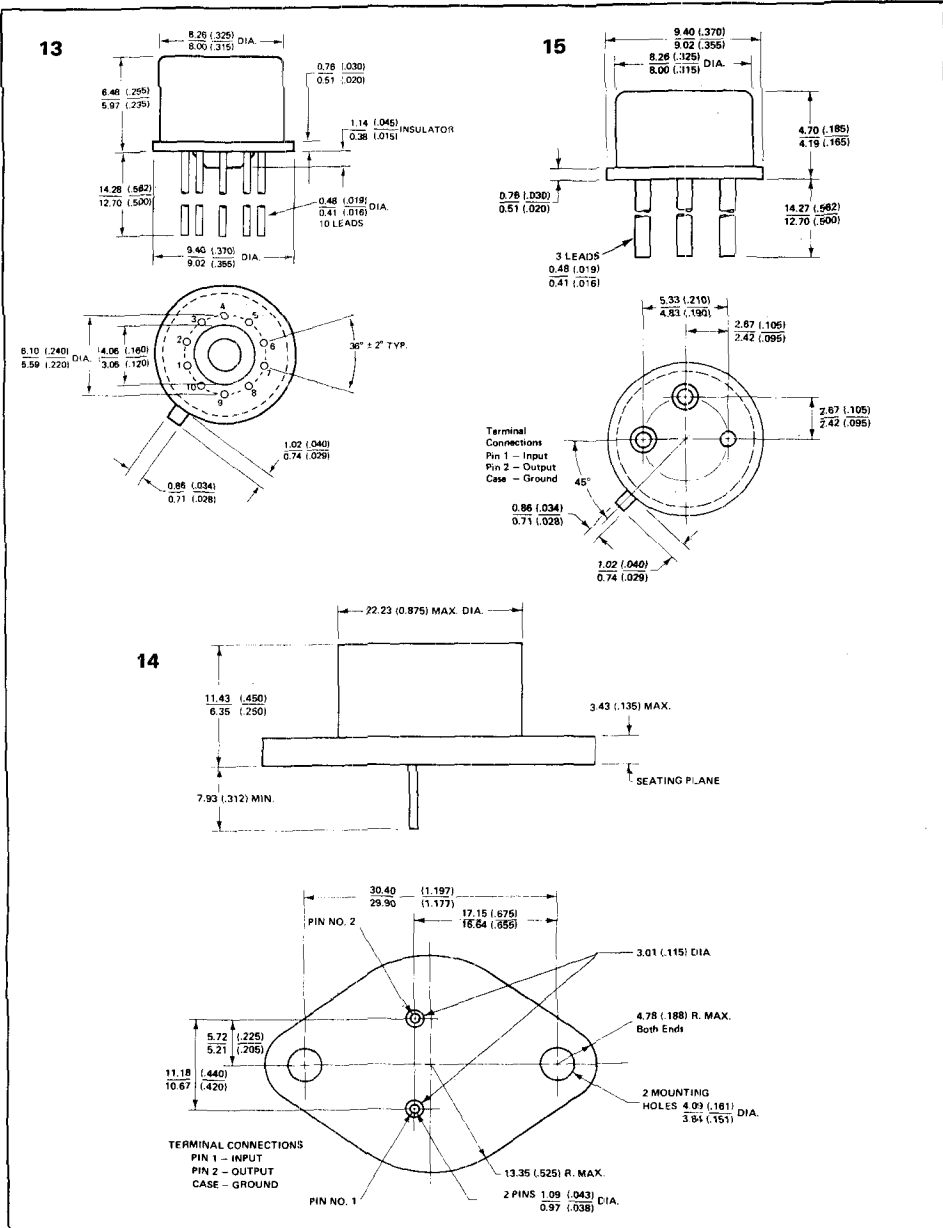
III GEMINI

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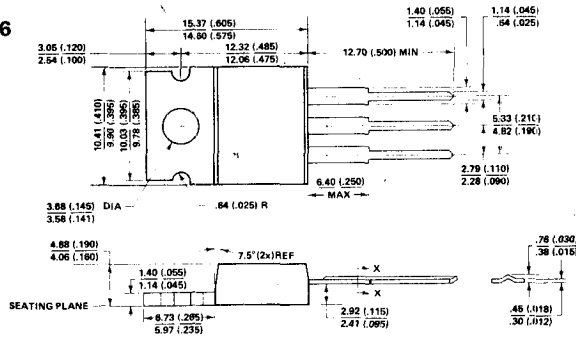


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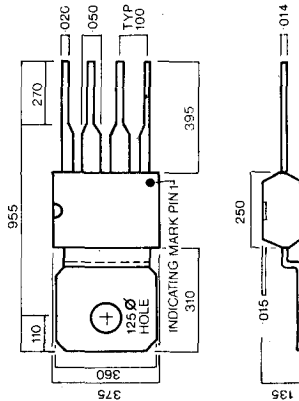
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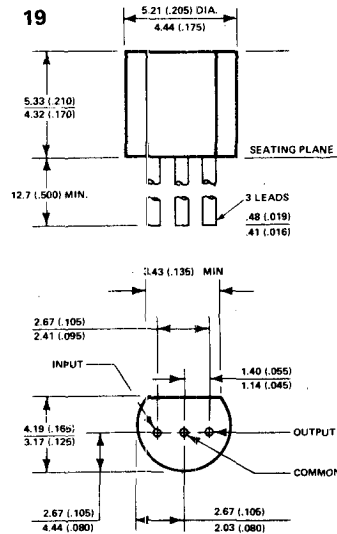
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