

Signetics

Integrated Circuits – Voltage Regulators

μ A78L Series – 3 Terminal Positive Voltage Regulator

GENERAL DESCRIPTION

The μ A78L00 series of 3-Terminal Positive Voltage Regulators employ internal current limiting and thermal shutdown, making them essentially indestructible. If adequate heat sinking is provided, they can deliver up to 100mA output current. They are intended as fixed voltage regulators in a wide range of applications including local or on card regulation for elimination of noise and distribution problems associated with single point regulation. In addition, they can be used with power pass elements to make high current voltage regulators. The μ A78L00 used as a Zener diode/resistor combination replacement, offers an effective output impedance improvement of typically two orders of magnitude, along with lower quiescent current and lower noise.

FEATURES

- Output current up to 100mA
- No external components
- Internal thermal overload protection
- Internal short circuit current limiting
- Available in JEDEC TO-92 and low profile TO-39 packages
- Output voltages of 2.6V, 5V, 6.2V, 8.2V, 12V and 15V.
- Output voltage tolerances of $\pm 5\%$ (78L00-A) and $\pm 10\%$ (78L00) over the temperature range (note: 78L00-A series stocked by Gemini. Please refer to Gemini for the 78L00 ($\pm 10\%$) device).

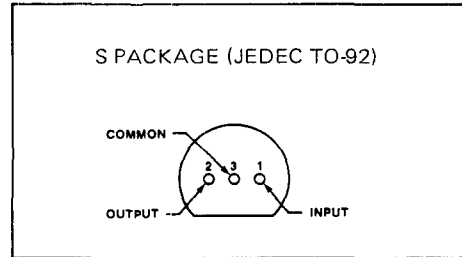
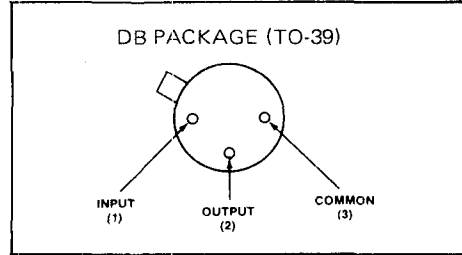
VOLTAGE RANGE

OUTPUT VOLTAGE	PART NO.
2.6V	78L02
5V	78L05
6V	78L06
8.2V	78L08
12V	78L12
15V	78L15
18V	78L18
24V	78L24

REFERENCE TABLE

TYPE NO.	STOCK NO.	OUTLINE DRWG. NO.
μ A78L02ACDB	56153G	18
μ A78L02ACS	56154E	19
μ A78L05ACDB	56155C	18
μ A78L05ACS	56156A	19
μ A78L06ACDB	56157X	18
μ A78L06ACS	56158H	19
μ A78L12ACDB	56159F	18
μ A78L12ACS	56160R	19
μ A78L15ACDB	56161G	18
μ A78L15ACS	56162E	19
μ A78L18ACDB	56163C	18
μ A78L18ACS	56164A	19
μ A78L24ACDB	56165X	18
μ A78L24ACS	56166H	19

CONNECTION DIAGRAM



MAXIMUM RATINGS

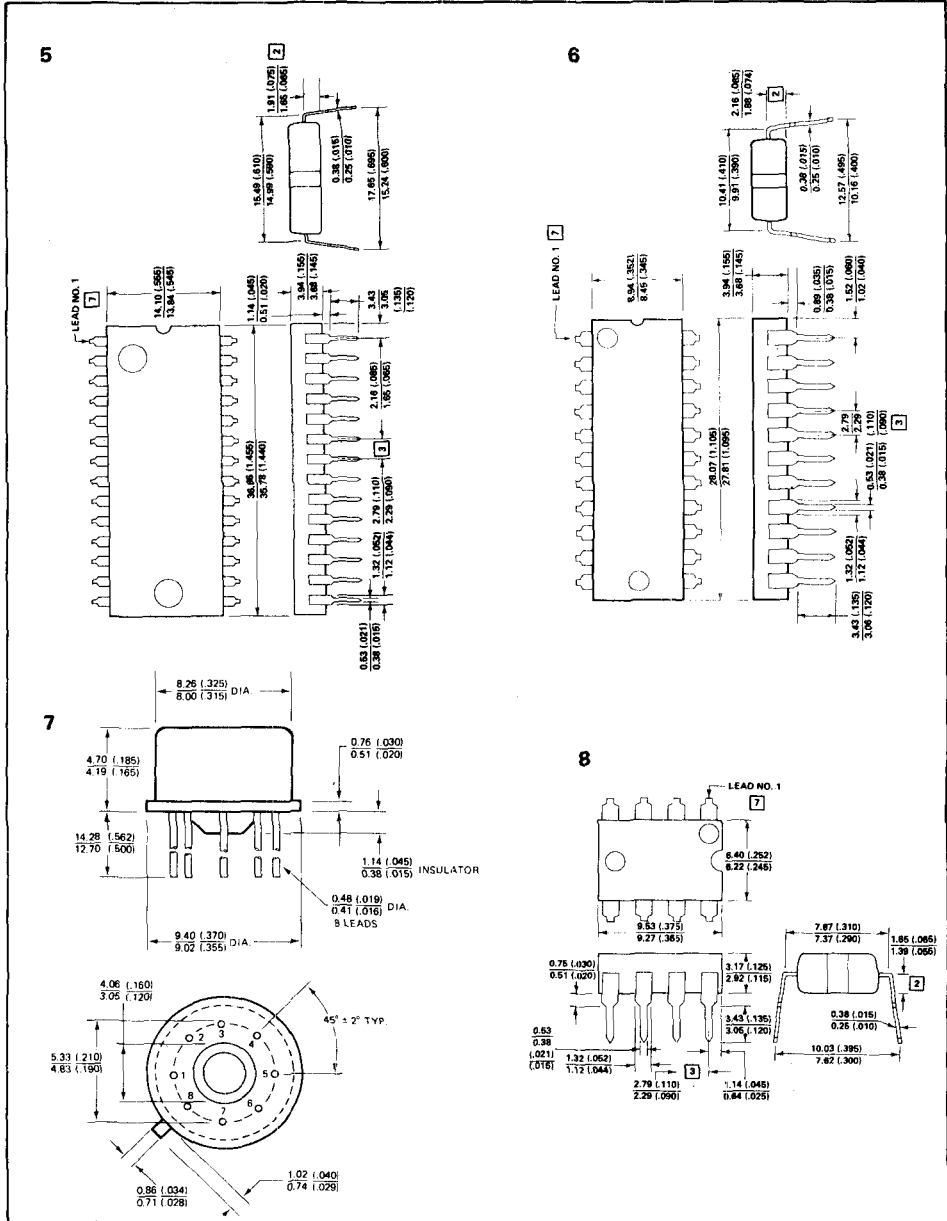
PARAMETER	RATING	UNIT
Input voltage		
2.6V, 5V, 6.2V and 8.2V	30	V
12V and 15V	35	V
Internal power dissipation	Internally limited	
Storage temperature range		
Metal can (TO-39 type)	-65 to +150	$^{\circ}$ C
Molded TO-92	-55 to +150	$^{\circ}$ C
Operating junction temperature range	0 to +150	$^{\circ}$ C
Lead temperatures		
Metal can (soldering, 60s time limit)	300	$^{\circ}$ C
Molded TO-92 (soldering, 10s time limit)	260	$^{\circ}$ C

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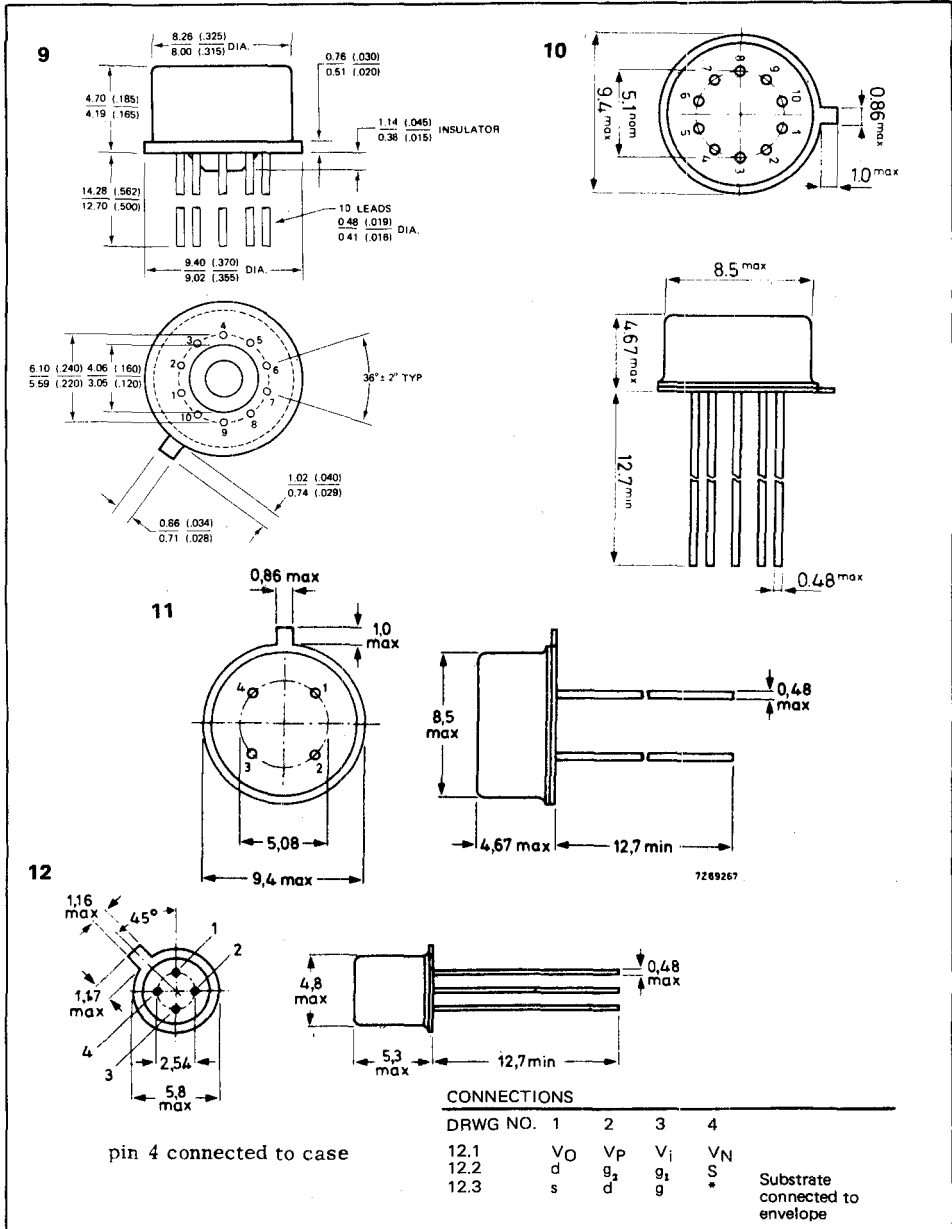
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Outline Drawings



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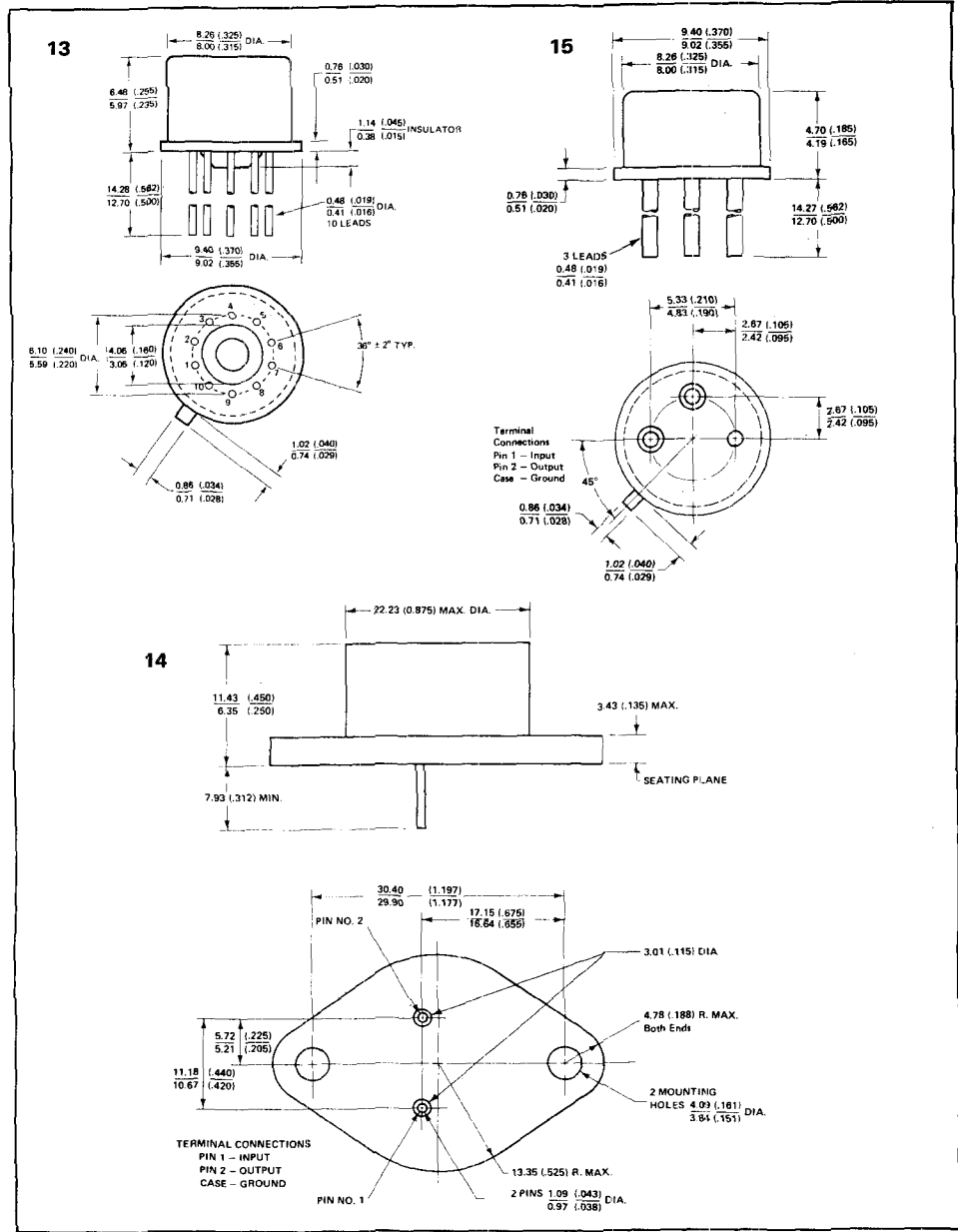


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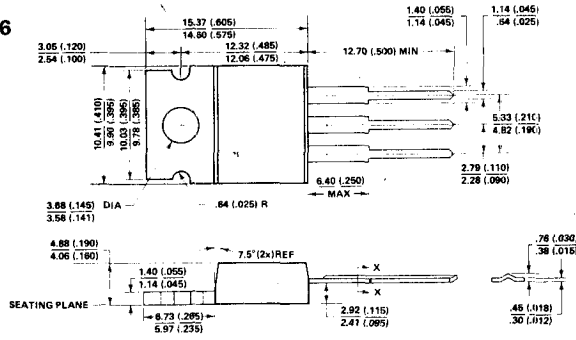
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Outline Drawings

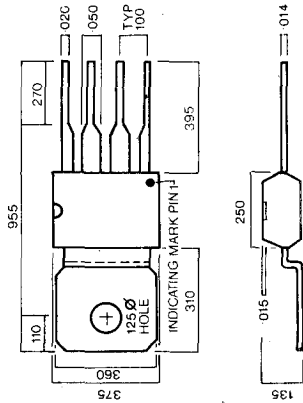


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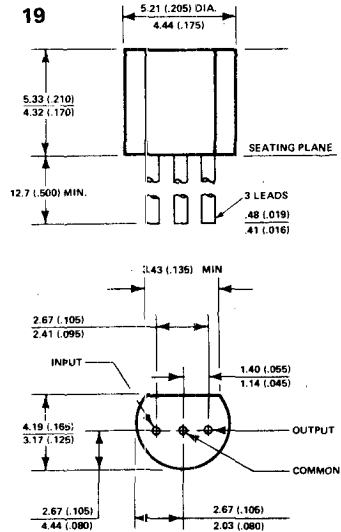
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