


<b>52500</b>	<b>HEATER, 18V, 9W, FACTORY SET TEMPERATURE</b>	 <b>MICROPAC INDUSTRIES</b> <b>MICROCIRCUITS DIVISION</b>
<i>PRODUCT PREVIEW</i>		

<b>Features:</b> <ul style="list-style-type: none"> <li>• Factory set temperature up to 100°C</li> <li>• Temperature controlled to <math>\pm 2.5^{\circ}\text{C}</math> of set point</li> <li>• Nominal 18V, 9W operation</li> <li>• Available with solder pads or attached lead wires</li> </ul>	<b>Applications:</b> <ul style="list-style-type: none"> <li>• Ideal for tight temperature control of sensitive electronic components such as oscillators and SAW devices</li> </ul>
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## DESCRIPTION

The 52500 is a subminiature heater, whose temperature is factory set to a customer specified temperature up to 100°C. This device is ideally suited for regulating the temperature of sensitive electronic components such as oscillators and SAW devices. The 52500 is in a ceramic package and can supply up to 9 watts of power from an unregulated 18V (nominal) power supply and is available with pads suitable for soldering or with attached lead wires.

## PRODUCT STATUS

This document contains information on a product under development. Micropac reserves the right to change or discontinue this product without notice.

**Table 1 Absolute Maximum Ratings**

Rating	Symbol	Value	Unit
Supply Voltage	$V_{DD}$	20	Volts
Power Dissipation	$P_D$	11	Watts
Operating Temperature	$T_O$	-55 to +100	$^{\circ}\text{C}$
Storage Temperature	$T_S$	-65 to +150	$^{\circ}\text{C}$

**Table 2 Operating Characteristics**

Rating	Symbol	Min	Max	Unit
Supply Voltage	$V_{DD}$	+12	+18	Volts
Power Dissipation	$P_D$		9	Watts
Factory Temperature Set-Point	$T_C$	50	100	$^{\circ}\text{C}$
Temperature Variation	$\Delta T_C$		$\pm 2.5$	$^{\circ}\text{C}$

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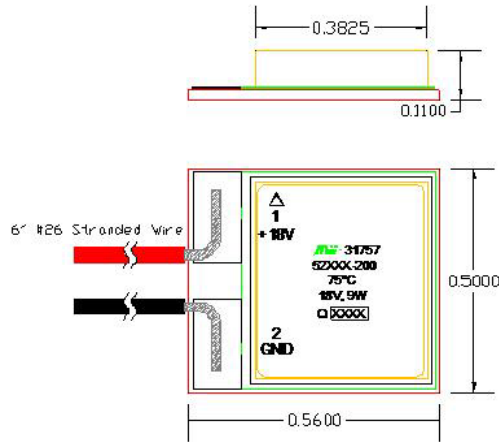


Figure 1 Case Outline X (Shown With Lead Wires)

Table 3 Ordering Information

Part Number	Case Outline	Termination
52500-SP-TTT	X	Solder Pad
52500-LW-TTT	X	Lead Wires

Where TTT corresponds to 3 digit temperature set point (from 050 to 100°C).

**SCREENING**

All 52500 heaters receive the following MIL-STD-883 screening:

- Precap internal visual Method 2017, Condition B
- Temperature cycling, Method 1010, Condition B
- Constant acceleration, Method 2001, Condition B, Y axis only
- Fine and Gross leak test, Method 1014, Conditions A & C
- External visual, Method 2009

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