



**AdSem, Inc.**

*Advanced Semiconductors Company*

## Semiconductor Materials

AdSem offers following single crystal and polycrystalline Si and Ge ingots/wafers p- and n-type:

Materials	Max Diameter, inch / mm	Available Resistivity range, Ohm-cm	Impurity concentration $/N_A - N_D/, \text{cm}^{-3}$
<b>Large Diameter Silicon</b>			
<b>1. Single crystal Si*</b> * slip free for diameter < 12"/300	19"/490	0.001 - 50	$10^{14} - 10^{20}$
<b>2. Polycrystalline Si</b>	22"/560		
<b>Neutron Transmutation Doped Si</b>			
<b>Single crystal or polycrystalline, (ingot length up to 100cm)</b>	Up to 6"	$3.0 - 2 \times 10^4$	$5 \times 10^{11} - 1.5 \times 10^{15}$
<b>Neutron Transmutation Doped Germanium</b>			
<b>Single crystal or polycrystalline</b>	Up to 4"	0.01 - 50	$10^{11} - 5 \times 10^{17}$
Custom ingot size and increased uniformity of impurity distribution in neutron doped Si and Ge ingots are available			