

**ABSTRACT****AL BONDING WIRE**

There is provided an Al bonding wire which can provide  
5 a sufficient bonding reliability of bonded parts of the  
bonding wire under a high temperature state where a  
semiconductor device using the Al bonding wire is operated.  
The bonding wire is composed of Al or Al alloy, and is  
characterized in that an average crystal grain size in a  
10 cross-section of a core wire in a direction perpendicular  
to a wire axis of the bonding wire is 0.01 to 50  $\mu\text{m}$ , and  
when measuring crystal orientations on the cross-section of  
the core wire in the direction perpendicular to the wire  
axis of the bonding wire, a crystal orientation  $\langle 111 \rangle$   
15 angled at 15 degrees or less to a wire longitudinal  
direction has a proportion of 30 to 90% among crystal  
orientations in the wire longitudinal direction.

[No figure]