

ABSTRACT
BONDING WIRE

There is provided a metal-coated Al bonding wire which
5 can provide a sufficient bonding reliability of bonded
parts of the bonding wire under a high temperature state
where a semiconductor device using the metal-coated Al
bonding wire is operated. The bonding wire includes a core
wire of Al or Al alloy, and a coating layer of Ag, Au or an
10 alloy containing them formed on the outer periphery of the
core wire, and the bonding wire is characterized in that
when measuring crystal orientations on a cross-section of
the core wire in a direction perpendicular to a wire axis
of the bonding wire, a crystal orientation $\langle 111 \rangle$ angled at
15 15 degrees or less to a wire longitudinal direction has a
proportion of 30 to 90% among crystal orientations in the
wire longitudinal direction. Preferably, the surface
roughness of the wire is 2 μm or less in terms of Rz.

20 [No figure]