

IMSi Aluminum Wafer 200mm & 300mm

Wire bonding is one of the traditional techniques for interconnects in electronic devices and is widely used for semiconductor OSAT (Outsourced Semiconductor Assembly and Test) field. An aluminum wafer is normally applied to wire bonding test for replacing high-cost process wafer. Au/Cu is ball bonded to Al pad which forms an IMC (Intermetallic compound) layer and provides adhesion between wires and pad.

"IMSi Aluminum Wafer" uses sputter deposited aluminum layer. Compared with evaporation technique, sputtering has more advantages on step coverage, adhesion and so on. Adhesion is an important characteristic of wire bonding process. "IMSi Aluminum Wafer" uses adhesion testing performed according to <u>ASTM D3359</u> and achieves classification 5B which is the best result of the test.

Parameter	Specification	
Diameter (mm)	200	300
Thickness (µm)	725±25	775±25
Growth Method	MCZ/CZ	
Туре	P/N	
Dopant	B, Ph, As, Sb	
Crystal Orientation	<100>	
Resistivity (Ohm-cm)	0.1-100	
TTV (μm)	≤25	
Bow/Warp (μm)	≤50	
Aluminum Layer Thickness (Å)	1,000-50,000	
Aluminum Layer Thickness Tolerance (%)	±10	
Adhesion Test	Classification 5B	

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