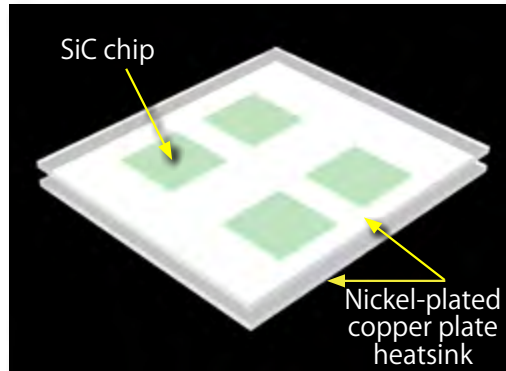




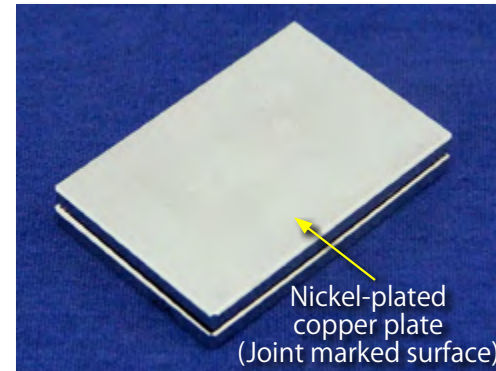
SoundBonding application



〈The both sides die-bonding of SiC chips and heatsinks〉 (Patents pending)



Inside image of both sides die-bonding structure



After both sides die-bonding by sound

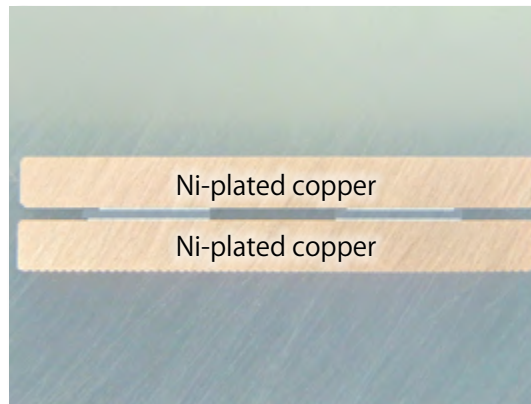
[SiC package]

Both sides die-bonding of four SiC chips between two Ni-plated copper plates

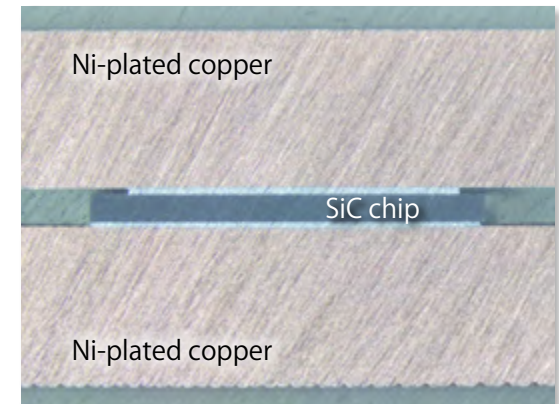
3DB DM Bonding

Different Materials Bonding

- ★ [3DB & DMB] by stacked different materials
- ★ Die-bonding of four SiC chips and nickel-plated copper heatsinks
- ★ Bonding by sound energy only, no need of bond and metal paste with heat
- ★ Cleared heat shock test (-50 ~ 600°C)
- ★ Bonding at room temperature in atmosphere
- ★ Supplied energy is electricity and air only
- ★ Bonding on desktop



Example observation
Both sides die-bonding cross section



Enlarged bonding part

SoundPower[®]
Laboratory

ULTEX[®]