

SoundPower also achieves a new technological revolution in "Semiconductor process"

— Already prepared the base of future processing technology —

Sound-Energy has been pursued by Ultex as the most advanced technology expands
 【Wafer cut】 and 【Diffusion different materials】 processes in semiconductor field

Since 1990, Sound energy has been used in general consumption fields such as <Lithium-ion batteries • Hybrid vehicles>. Furthermore, these were proved of possibility to join steel and different materials such as [Steel • Ceramics • Superconductors] in the last few years.

For the future, Ultex will continue to pursue the sound energy applications by technical idea of SPS (Sound Power for Space) based on space phenomena.

Practical technology

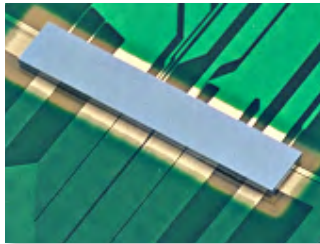


1992 ~ LiB mass production 1998 ~ HEV Prius mass production

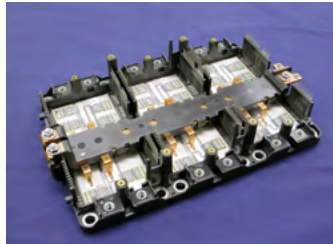
18650 BATTERY



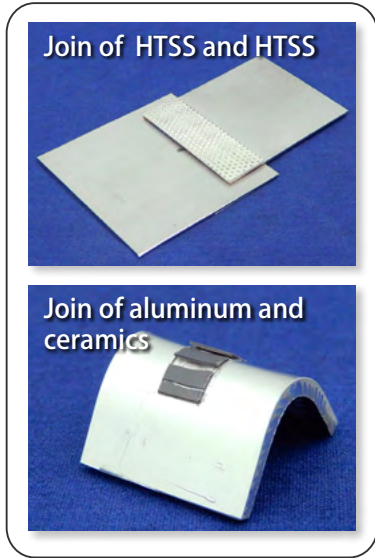
2002 ~ Flip Chip mass production



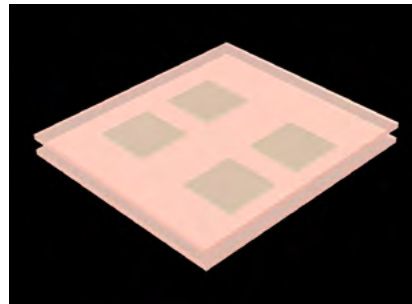
2005 ~ LEXUS power module mass production



SoundPower[®]
Laboratory



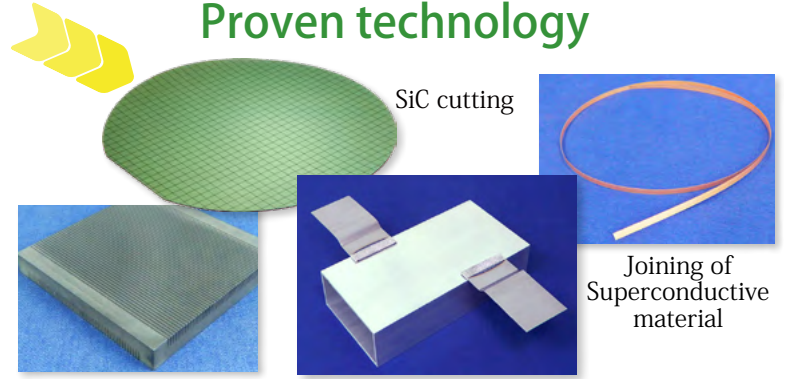
Advancing technology



Joining of SiC 4chips sandwiched between Cu plates at once

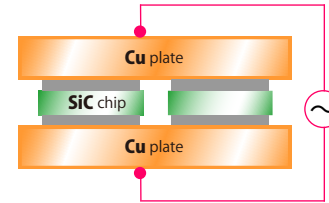
Focusing on highest hardness [Diamond] and [Various materials] in the space, Ultex propose the potential of the most advanced sound energy for the reconstruction of [Semiconductor] field, [Development of ZEV vehicle], and moreover accelerating [Superconductivity] industry in Japan. Thereby Ultex will continue to contribute to the society hastening to solve the problems by greening.

Proven technology



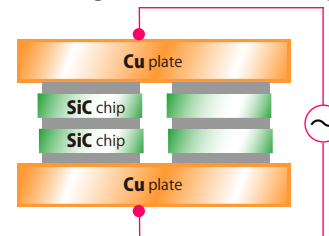
Slitting of Graphite Joining of HTSS and aluminum

[Join at once, both sides of SiC chips between Cu plates]



SoundPower joining at room temperature in the atmosphere, the resistance between Cu can be changed by joining process

[Joining of 2 stacked SiC chips between Cu plates]



Current can flow between multi-stacked SiC chips

ULTEX