

Highly Durable Lead-free Solder Paste

High joining durability and reliability. Maintain thermal-resistant fatigue properties under the severe environment.

LSP series

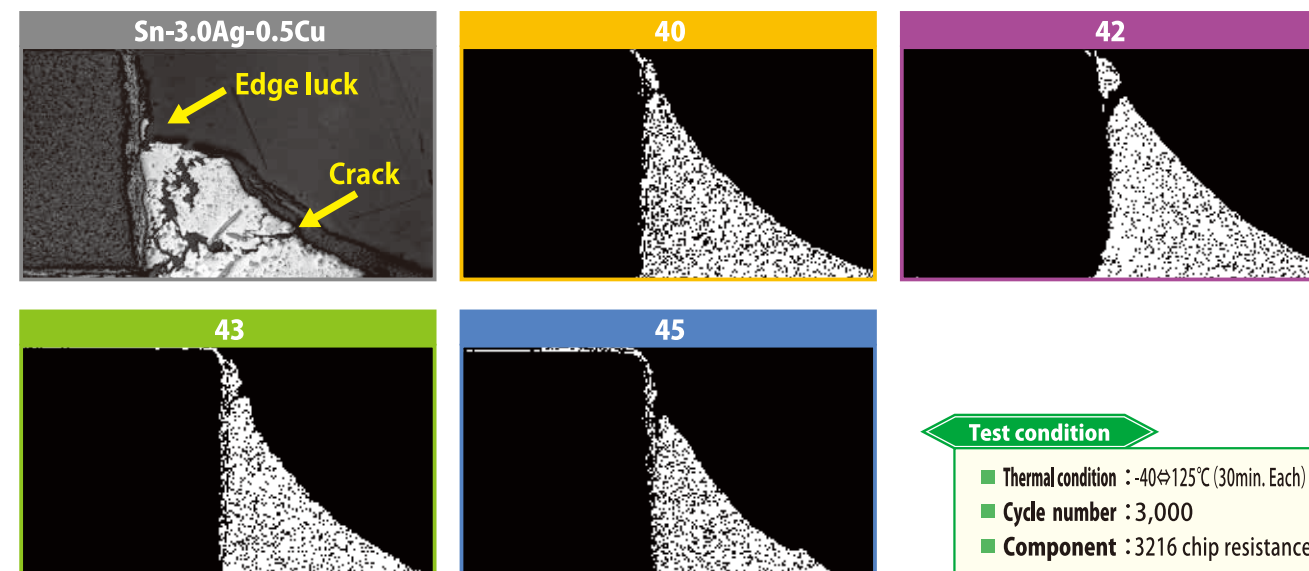
Alloy composition

Patented

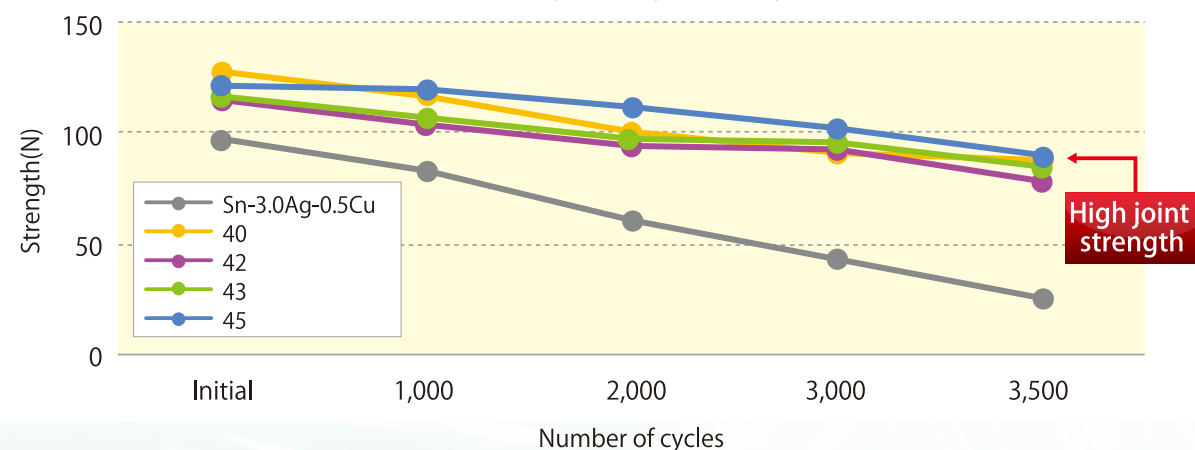
Alloy number	Product name	Alloy composition	Melting point*
40	PS40BR-600A-LSP	Sn-3.0Ag-0.5Cu-2.7Bi+ α	209°C
42	PS42BR-600A-LSP	Sn-1.1Ag-0.6Cu-1.5Bi+ β	237°C
43	PS43BR-600A-LSP	Sn-3.8Ag-0.5Cu-3.0Bi+ γ	210°C
45	PS45BR-600A-LSP	Sn-3.5Ag-0.7Cu-3.0Bi+ δ	222°C

* JIS Z 3198-1

Excellent heat-resistant fatigue properties



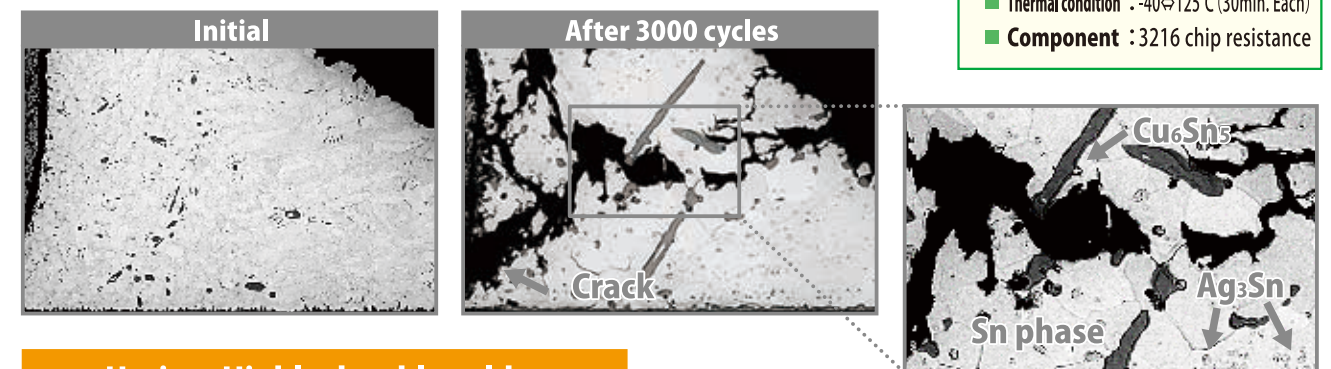
Joint Strength during Thermal cycles



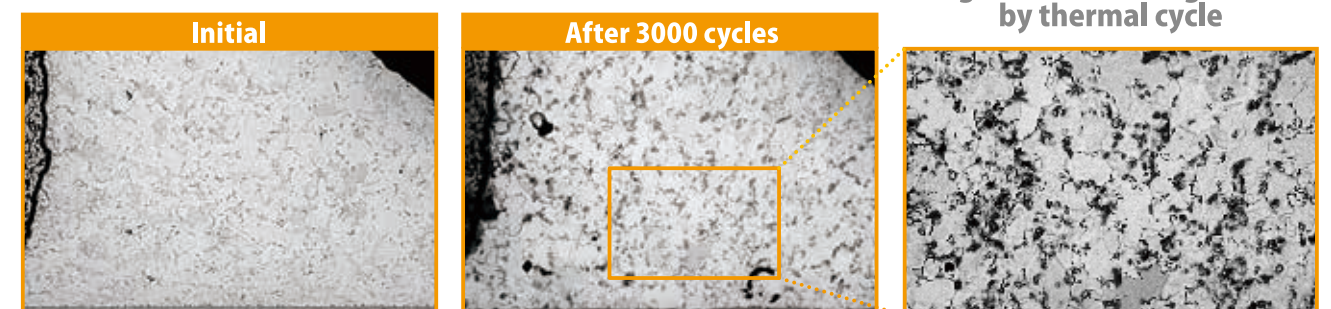
High joining durability and reliability for thermal cycle test with inhibition of crack generation

Mechanism of the crack extension restraint

Conventional solder Sn-3.0Ag-0.5Cu

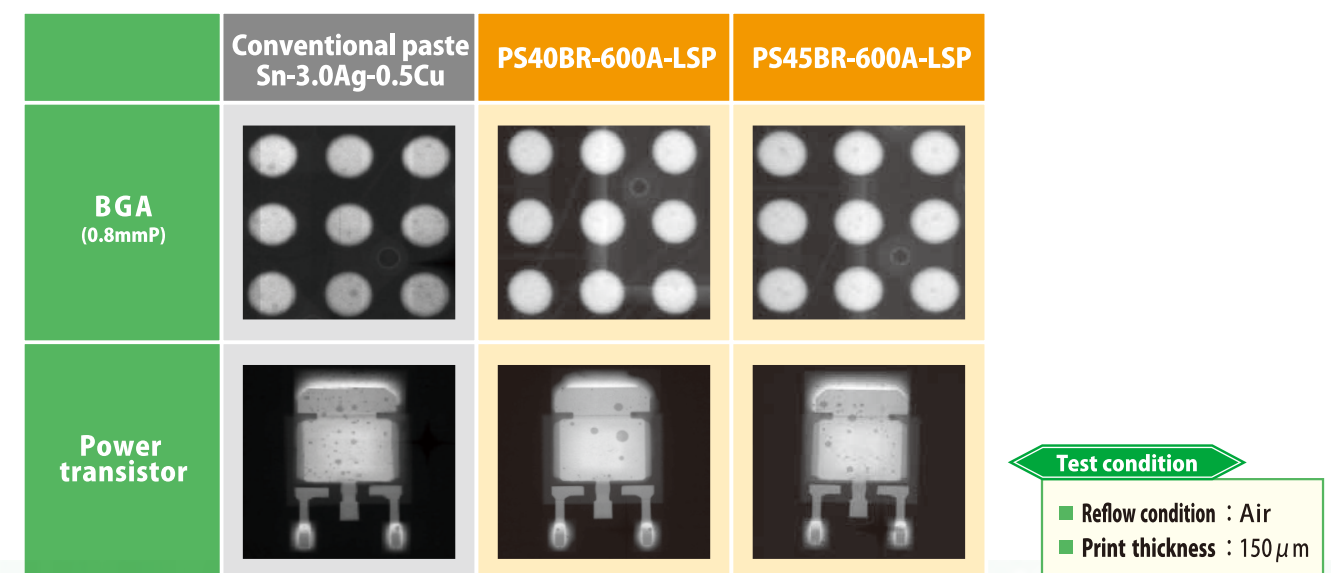


Harima Highly durable solder



- Maintain finer organization after thermal cycle
- Crack prevention by finer dispersed and crystallized intermetallic compound.

Void Test



Less void generation by Flux optimization