





# Viromet 349

## Comparison of Lead-free Viromet 349 with Lead solder in Actual Field Trials

### 1) Temperature and transfer speed investigation results

#### Analysis On "Solder Crack" As Compared To PbSn Solder

Test Item		Profile	1.8 m/min 245°C PbSn	1.0 m/min			1.4 m/min			1.8 m/min		
				235°C	245°C	255°C	235°C	245°C	255°C	235°C	245°C	255°C
Whisker Test			0%	△	△	△	△	△	△	△	△	△
Vibration Test			0%	△	△	△	△	△	△	△	△	△
Terminal Destroy Test	Terminal Strength		0%	△	△	△	△	△	△	△	△	△
	Terminal Shear		0%	△	△	△	△	△	△	△	△	△
Thermal Shock Test	Treatment		0%	X	△	X	X	△	△	△	△	△
	w/o Treatment		100%	△	☆	△	△	☆	😊	☆	☆	😊
High Temperature Test	Treatment		0%	X	X	△	△	X	X	△	△	△
	w/o Treatment		100%	😊	△	😊	☆	△	😊	☆	😊	😊
Result				X	X	X	X	X	X	△	△	△

 Distinctive    
  Better    
  Same    
  Worst

From above reliability testing, QA concludes that Pb free solder VIROMET 349 shows no weaknesses or major failure as compared with the PbSn solder.