

Application Note-Type CHR Chip Resistor Soldering of Pt/Ag Termination and RoHS Solder June 1, 2009

Our Type CHR chip resistors have Pt/Ag terminations. The Pt stabilizes the termination against leaching issues. For RoHS compliant solder, if the copper solder is SnCu0.7 (melting point 227°C) there should be no problem with our Pt/Ag termination. The copper prevents silver leaching (comparable with a silver content but cheaper, and at a higher melting point). We are not aware of any silver migration problems with our Pt/Ag termination. Because of a fear of silver migration, some of our customers do not use silver bearing solder materials (such as SAC, etc.).

The Pt/Ag termination is qualified for the soldering profiles according to IPC-standards, IEC-standards, and EN-standards. A special profile is not necessary. The components have to work together with many other components. The soldering profile for a PCB is usually determined not only by the components but also by the design, the type of PCB, the solder, and the flux, etc. Therefore we do not recommend a special profile but we qualify our components for the standard profiles (as mentioned in the data sheets).

A note about the Pd/Ag termination in our chip resistor products:

Normally Pd/Ag termination is only used for special applications and not for our standard chip resistor products. This is due to the fact that the solderability is not as good as the solderability of Pt/Ag.



BREL International Components, Inc.
2001 Whitfield Park Ave.
Sarasota, Florida 34243



Phone 941-758-7500
Sales: 800-237-4564
Fax: 941-758-7556
E-Mail: sales@brelintl.com
Website: www.brelintl.com
Issue: June-2009
Page: 1 of 1