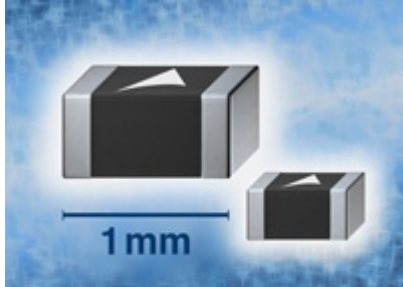


## Products & Technologies



Varistors

July 2008

## World's smallest package for varistors and CeraDiodes

EPCOS is the first manufacturer of ESD protection components to offer low-capacitance CeraDiodes® and multilayer varistors (MLV) in a 0201 package. The variants with capacitances of 22 pF are distinguished by a low clamping voltage and are suited for the protection of LED background lighting, for example. Types with capacitances of up to 10 pF have also been developed for USB and Ethernet systems. Because of the need to

minimize parasitic capacitances, especially in RF technology, EPCOS is developing a special antenna varistor with a capacitance of less than 1 pF.

Integrated ESD/EMI filters comply fully with the trend toward miniaturization and integration of components designed specifically for mobile phones. EPCOS has developed two types of ESD/EMI filter arrays. The 0405 audio filter protects microphone and loudspeaker leads from ESD damage and interference, and RC filters in 0508 and 0306 packages were developed to protect display lines. While the audio filter replaces ten discrete components, the RC filter takes the place of twenty components packed in a single package. This level of integration allows the number of individual components on the circuit board to be reduced, thus increasing the reliability of the equipment, as fewer solder points are needed. In addition, development costs are also reduced.