

Properties and Applications of Thick Film High Temperature Superconductors

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Melt processed YBa/sub 2/ Cu/sub 3/O/sub x/ thick films display low surface resistance, moderate performance in fields and can be applied to three-dimensional (3-D) substrates with ease. The processing and properties of such films are described. Possible applications are examined and prototype devices are described. These include high Q, low frequency resonators for cellular communications filters, low phase noise oscillators, magnetic resonance imaging receiver coils, low noise magnetic shields, coils, flux transformers, and antennas.

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