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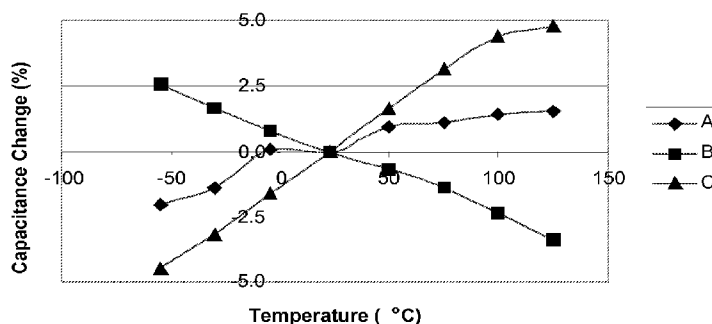
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(54) Title: POLYMER-CERAMIC COMPOSITES WITH EXCELLENT TCC

FIG.1

TCC characteristics of polymer-ceramic composites (+/- 5.0%)



(57) Abstract: Polymer-ceramic composite materials for use in the formation of capacitors, which materials exhibit very low changes in temperature coefficient of capacitance (TCC) in response to changes in temperature within the range of from about -55 0C to about 125 0C. Specifically, these capacitor materials have a change in TCC ranging from about -5 % to about +5 %, in response to changes in temperature within the desired temperature range. The inventive composite materials comprise a blend of a polymer component and ferroelectric ceramic particles, wherein the polymer component includes at least one epoxy-containing polymer, and at least one polymer having epoxy-reactive groups. The inventive polymer-ceramic composite materials have excellent mechanical properties such as improved peel strength and lack of brittleness, electrical properties such as high dielectric constant, and improved processing characteristics.

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