

Advanced Energy Materials and Research

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Sa : The purpose of this paper is to study high-voltage interactions in polymer thick-film resistors, namely, polyvinyl chloride (PVC)-Graphite thick-film resistors, and their applications in universal trimming of these resistors.

M & **a** **O** : The authors applied high voltages in the form of pulses and impulses of various pulse durations and with different amplitudes to polymer thick-film resistors and observed the variation of resistance of these resistors with high voltages.

F : The paper finds that high voltages can be used for trimming of polymer thick-film resistors in both directions, i.e. upwards and downwards. The practical implications of this paper is that one can trim the polymer thick-film resistors, namely, PVC-graphite thick-film resistors, in both directions, i.e. upwards and downwards, by using this method.

O / **a** : The value of the paper is in showing that high voltages can be used to trim downwards and also upwards in the case of polymer thick-film resistors. This type of trimming is called universal trimming, developed first time for polymer thick-film resistors.

F : When high voltage pulses are applied to a polymer thick-film resistor with a particular resistivity either it is higher or lower one, it leads to increase in resistivity with shorter pulse duration of high voltage pulses and decreases in resistivity