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LTSpice Models for Vishay PTC PTCEL / PTCCL and PTCTL

Vishay introduces new LTSpice models for three series of pressed-pill PTC components:

- PTCEL: inrush current limiter and energy load-dump
- PTCCL: high voltage from 600 V to 1000 V
- PTCTL: overload protection for telecommunications (not all parts within the series are modelled)

The model parameters are suitable for DC, AC, and transient simulations within the framework of a statistical Monte Carlo analysis. The library can only be used with LTSpice IV and LTSpice XVII 64 bits, as it was encrypted in order to protect the modelling content.

Below is a screen shot of one of several simulations made available to our customers, in this case a DC simulation of the current / voltage of a PTCEL13R600LBE, showing both measurements and simulation results (with a Monte Carlo random distribution).
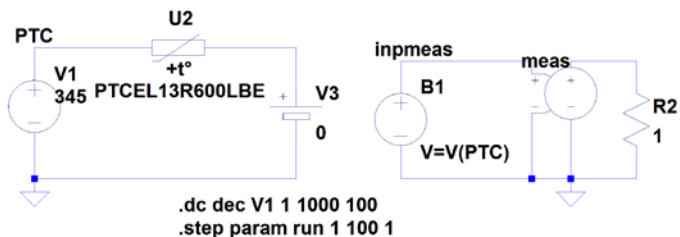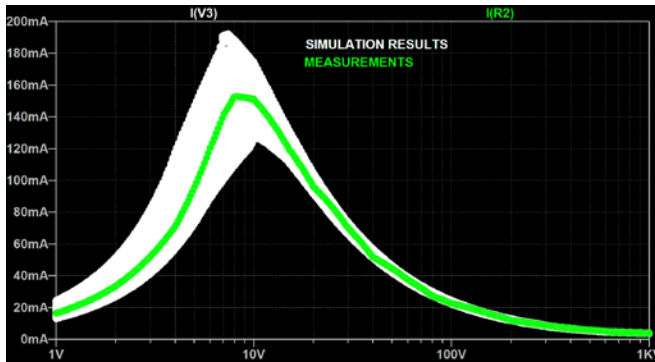
The models and library are available at www.vishay.com/doc?29184 and can be downloaded from any web page of the concerned series data sheets.
Application notes for the models have been published at www.vishay.com/doc?29180

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