

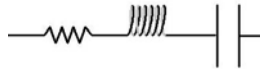
## KEMET SPICE SOFTWARE

### The Perfect Capacitor

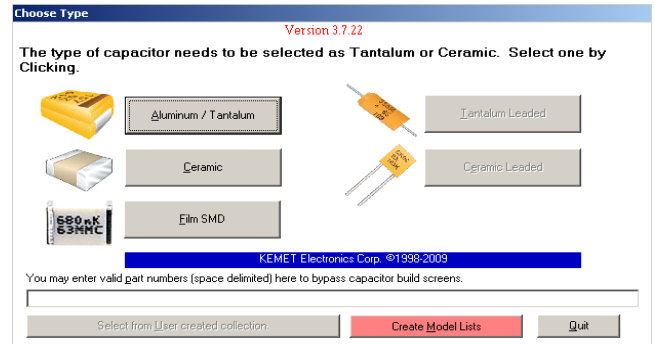


- Impedance always declining with increasing frequency
- ESR (Equivalent Series Resistance) of 0 Ohms
- ESL (Equivalent Series Inductance) of 0 Henries
- Has no self-resonance
- There are NO perfect capacitors

### The “Simple” RLC



- Every capacitor has a parasitic resistance and inductance
- The impedance of a capacitor is complex with real (resistive) and imaginary (reactive) elements
- The impedance of a capacitor varies with frequency
- Every capacitor has a series-resonance frequency (SRF) where the inductive and capacitive reactances cancel
  - Up to that frequency, the capacitive element dominates the reactance
  - Beyond that frequency, the inductive element dominates the reactance



## KEMET Spice options

## EDA tool providers

## KEMET Net List Files

The KEMET Spice program has the capability to create ASCII files for importing as models into commercial Spice software. The listing below will allow jumps to appropriate pages which will contain a listing of all models specifically created for that software or model format.

- Click here for [Ansoft](#)
- Click here for [Cadence](#)
- Click here for [Mentor](#)
- Click here for [NetList](#)
- Click here for [S Parameters](#)
- Click here for [Sigirty](#)
- Click here for [SIMPLIS](#)
- Click here for [Touchstone](#)
- Click here to [download circuit diagrams \(.jpg and .slb\) "Circuit Drawings.zip"](#)

Download Files from [www.kemet.com](http://www.kemet.com)

Create Files from KEMET Spice

### Models for Customers

SPICE Std. — SPICE Custom

General Customer

Mentor  
 Cadence  
 Sigirty  
 Ansoft  
 Simplis

