**Dissipation factor and what it means**

Dissipation factor gives the rate of heat generated per second (i.e Ploss) for a given temperature rise above the ambient temperature. Therefore, it has a unit of W/K.

**Power limitation of the device**

It seems that the power limitation of the device, Pmax, gives the amount of power dissipation before the NTC goes into thermal runaway. Thus, I think Pmax is the power where the amount of energy generated within the NTC is equal to the amount of energy the NTC can remove from its body

**Ctest**

In for NTC used for inrush current limiting, the inrush current can be associated with a pulse of energy during the impulse. This energy needs to know in able to select an appropriate NTC size. Manufacturers typically, associate this energy with a capacitor discharge for a given voltage thus giving a capacitance for a given voltage and energy.

**General steps to pick**

1.)Pick the size – Size can be determined by the Ctest. Basically, if the pulse energy is known , then a corresponding Ctest can be matched for a given line voltage.

2.) Choose the R25 to limit the inrush current.

3.) Make sure the maximum steady state current if higher enough.

**Links**

<https://www.newark.com/wcsstore/ExtendedSitesCatalogAssetStore/cms/asset/images/americas/common/storefront/epcos/inrushCurrentLimiters.pdf>

<https://www.tdk-electronics.tdk.com/download/2982800/f5be4fca9d1f66204de9cf37891e5265/ntc-thermistors-icl-an.pdf>

<https://www.tdk-electronics.tdk.com/download/531338/d80caa7d75198765c2534bc19da9b73d/pdf-general-technical-information.pdf>