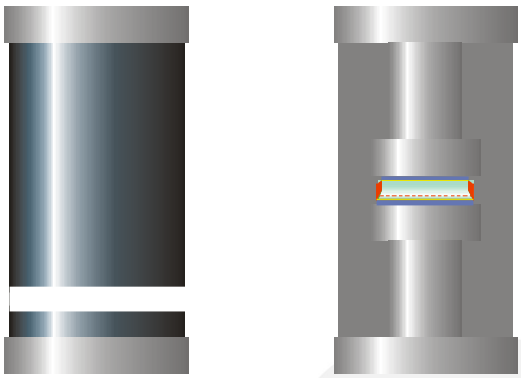
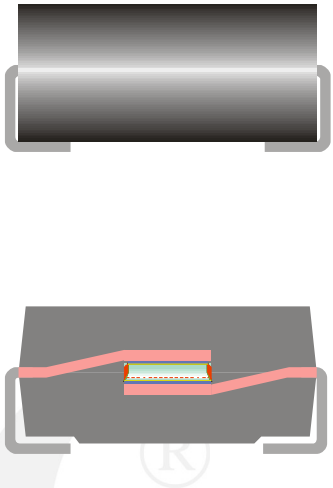
Comparison between Melf and SMA package





Melf	SMA
Build with massive **copper plugs** (Nickel plated)	Build in **copper leadframe technology**
* Superior thermal resistance due to massive plugs removing heat easily	* Leadframe technology has got higher thermal resistance
* Superior surge current rating due to high thermal capacity of plugs, absorbing easily short lasting high energy surges	* Leadframe technology has got less thermal capacity
* Tends to "roll away" during assembly, therefore better suited for wave soldering (where devices are glued to the PCB)	* Suited for all kinds of soldering such as reflow or wave soldering
* More sensitive against mechanical forces applied to the plugs	* Leadframe technology provides better stress relief, therefore less sensitivity against mechanical stress to the leads
Parameters of a 1A/1000V Standard Rectifier – **SM4007** R_{thT} < 10K/W I_{FSM} = 40A	Parameters of 1A/1000V Standard Rectifier – **S1M** R_{thT} < 30K/W I_{FSM} = 30A
Some product highlights in Melf: * SM2000 – 1A/2000V Standard Rectifier * SM54xx series – 3A Standard Rectifiers * SA265 – 2A/2000V Fast Rectifier * TGL41-520C – 520V/400W TVS Diode * SDA4AK – 2V clamping device for data lines * TGL200F10 – series connection of 200V TVS and 1000V Fast Rectifier for flyback clamping circuits	Some product highlights in SMA: * S1Y – 1A/2000V Standard Rectifier * SK34SMA – 3A/40V Schottky Rectifier * P4SMA550CA – 550V/400W TVS Diode * CL20M35 – 20mA/90V Current Limiting Diode