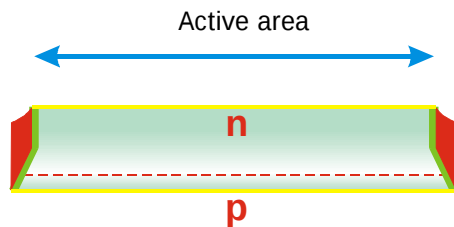


## Non-planar chip technology

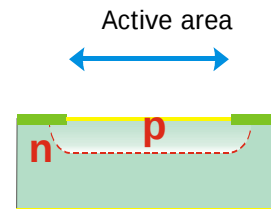


n zone top, p zone bottom  
large active area (e. g. Melf ~ 1.69 mm<sup>2</sup>)

### ⇒ Advantages

- High pulse capability
- High power dissipation
- high admissible zener current (Z-diodes)

## Planar chip technology

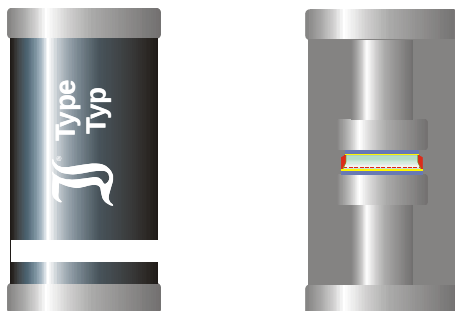


p and n zone within one planarity  
small active area (e. g. Melf ~ 0.36 mm<sup>2</sup>)

### ⇒ Advantages

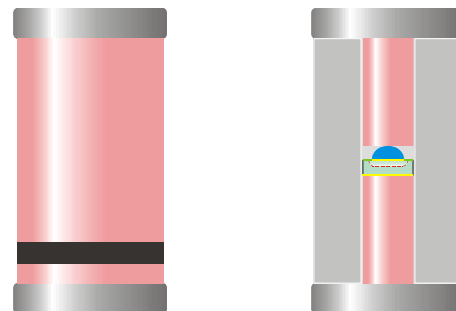
- Low junction capacity
- Low leakage current  $I_R$ , sharp curve even for Z-diodes with  $V_Z < 6.8$  V

## Assembly: plastic package



Chip soldered to contacts,  
molded with duroplast (UL94V-0)  
= high reliability and good heat transfer

## Assembly: glass package



Chip pressure contacted,  
within glass tube  
= simple assembly, but disadvantage  
in heat transfer

## Application

high currents/power/voltages  
e. g.

### MiniMELF case

ZMD1...100 (1 W Zener)  
GL1A...M (1 A, 50...1000 V)

### MELF case

ZMY1...200 (1.3 W Zener)  
SMZ1...200 (2 W Zener)  
SZ3C1...200 (3 W Zener)  
SM513...2000 (1 A, 1.3...2 kV)

## Application

Small power/small signal diodes  
e. g.

### MiniMELF case

ZMM1...100 (500 mW Zener)  
LL4148 (200 mA, 100 V)

### MELF case

ZMY1G...100G (1 W Zener)