

FERMI LEVELS

Effect of doping

| INTRINSIC SEMICONDUCTOR | N-TYPE SEMICONDUCTOR | P-TYPE SEMICONDUCTOR |
|-------------------------|----------------------|----------------------|
| E_C ————— | E_C ————— | E_C ————— |
| E_F - - - - - | E_F - - - - - | E_F - - - - - |
| E_V ————— | E_V ————— | E_V ————— |