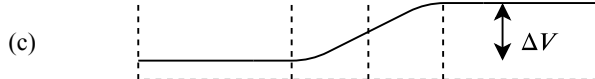


(a) $Q =$

| | | | |
|---|---|---|---|
| 0 | - | + | 0 |
|---|---|---|---|



The extrinsic semiconductors remain neutrally charged.