

SCHOTTKY DIODES KDN-15040A.

PRELIMINARY



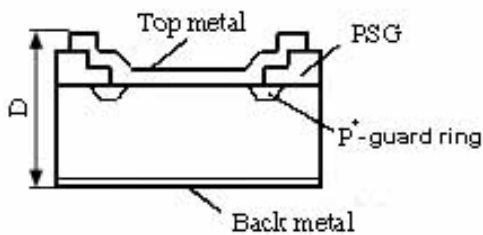
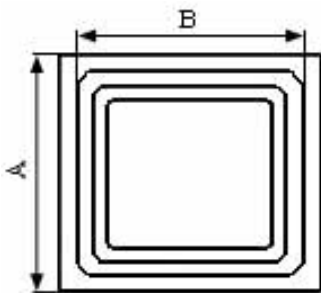
Rev.1. Feb. 2010



VSP-MIKRON

15A/40V. Die Size-115mil.

| Electrical Characteristics | Symbol | Unit | Spec. limit | Die Sort |
|---|-------------|------------|--------------------|-----------------------|
| Breakdown Voltage @ $I_R=10mA$ | V_{BR} | V | 40 | 45 |
| Average Rectified Forward Current | $I_{F(AV)}$ | A | 15,0 | - |
| DC Forward Voltage @ $25^\circ C, I_F=15,0A$ | V_F | V | 0,54 | 0,52 0,50 - typ. |
| Maximum Reverse Current @ $25^\circ C, V_R=45V$ $25^\circ C, V_R=40V$ $125^\circ C, V_R=40V$ | I_R | mA | - 0,30 180,0 | 0,40 0,30 170,0 |
| Peak Forward Surge Current 8,3ms single half sine-wave superimposed on rated load (JEDEC METHOD) | I_{FSM} | A | 200 | - |
| Peak Repetitive Reverse Surge Current @ $2,0\mu s, f=1kHz., T_J < 150^\circ C.$ | I_{RRM} | A | 4,5 | |
| Electrostatic Discharge Voltage. JEDEC Method. ESD HBM. Contact. | ESD | kV | ± 8 (contact) | |
| Voltage Rate of Change | dV/dt | V/ μS | 10.000 | |
| Operating Junction Temperature | T_J | $^\circ C$ | 150 | |



| DIM | ITEM | μm |
|-------------------|---------------------|--------------|
| A_x A_y | Wafer Form Die Size | 2920 2920 |
| B_x B_y | Top Metal Size | 2780 2780 |
| D | Thickness | 350max. |
| Scribe line Width | | 80 |

Top metal: a) **Al** – for Wire Bonding;
b) **Al-Ni-Ag** – for Soldering.

Backside metal: **Ti-Ni-Ag**.