
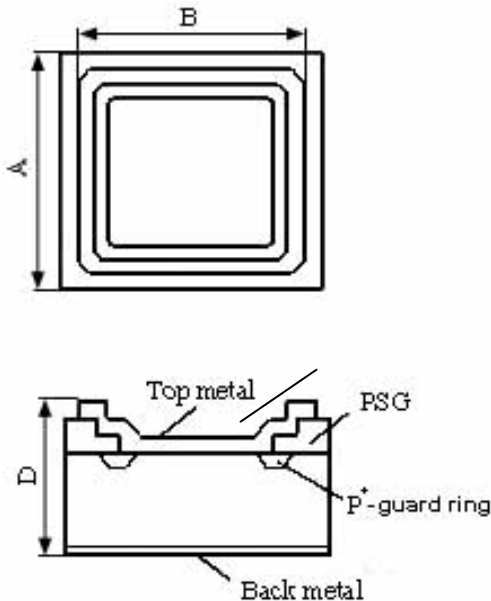


# SCHOTTKY DIODES KDN-05040.



Rev.1. Feb. 2010

|  <b>VSP-MIKRON</b>    |             | <b>5A/40V. Die Size-65mil.</b> |                    |                        |
|--|-------------|--------------------------------|--------------------|------------------------|
| Electrical Characteristics   | Symbol      | Unit                           | Spec. limit        | Die Sort               |
| Breakdown Voltage<br>@ $I_R=10mA$  | $V_{BR}$    | V                              | 40                 | 45                     |
| Average Rectified Forward Current  | $I_{F(AV)}$ | A                              | 5,0                | -                      |
| DC Forward Voltage<br>@ 25°C, $I_F=5,0A$   | $V_F$       | V                              | 0,53               | 0,51                   |
| Maximum Reverse Current<br>@ 25°C, $V_R=45V$<br>25°C, $V_R=40V$<br>125°C, $V_R=40V$                    | $I_R$       | mA                             | -<br>0,100<br>50,0 | 0,100<br>0,080<br>45,0 |
| Peak Forward Surge Current 8,3ms<br>single half sine-wave superimposed on<br>rated load (JEDEC METHOD) | $I_{FSM}$   | A                              | 110                | -                      |
| Peak Repetitive Reverse Surge Current<br>@ 2,0µs, $f=1kHz.$ , $T_J<150°C.$                             | $I_{RRM}$   | A                              | 2,5                |                        |
| Electrostatic Discharge Voltage.<br>JEDEC Method. ESD HBM. Contact.                                    | ESD         | kV                             | ±8 (contact)       |                        |
| Voltage Rate of Change   | dV/dt       | V/µS                           | 10.000             |                        |
| Operating Junction Temperature   | $T_J$       | °C                             | 150                |                        |



| DIM                              | ITEM                | µm           |
|----------------------------------|---------------------|--------------|
| A <sub>x</sub><br>A <sub>y</sub> | Wafer Form Die Size | 1650<br>1650 |
| B <sub>x</sub><br>B <sub>y</sub> | Top Metal Size      | 1510<br>1510 |
| D                                | Thickness           | 300max.      |
| Scribe line Width                |                     | 80           |

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

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