

**SCHOTTKY DIE SPECIFICATION**

TYPE: SB5100

General Description: 100 V 5 A Standard VF

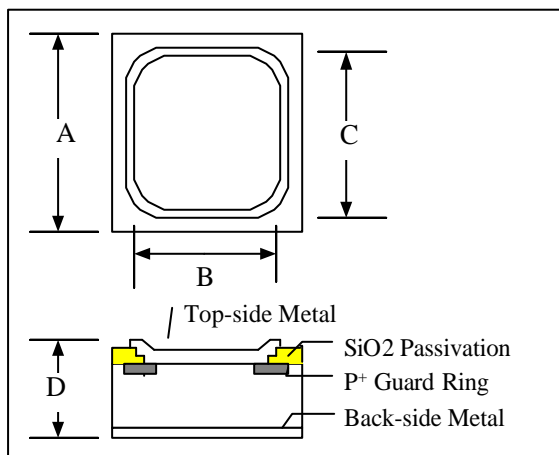
Single Anode

| ELECTRICAL CHARACTERISTICS                             | SYM    | Spec. Limit | Die Sort | UNIT             |
|--|--------|-------------|----------|------------------|
| DC Blocking Voltage: $I_r=1\text{mA}$ (for wafer form) | VRRM   | 100         | 105      | Volt             |
| $I_r=0.5\text{mA}$ (for dice form)                     |        |             |          |                  |
| Average Rectified Forward Current                      | IFAV   | 5           |          | Amp              |
| Maximum Instantaneous Forward Voltage                  |        |             |          |                  |
| @ 5 Amperes, $T_a=25^\circ\text{C}$                    | VF MAX | 0.83        | 0.82     | Volt             |
| Maximum Instantaneous Reverse Voltage                  |        |             |          |                  |
| $V_R= 100$ Volt, $T_a=25^\circ\text{C}$                | IR MAX | 0.3         | 0.25     | mA               |
| Maximum Junction Capacitance @ 0V, 1MHZ                | Cj MAX |             |          | pF               |
| <b>MAXIMUM RATINGS</b>                                 |        |             |          |                  |
| Nonrepetitive Peak Surge Current                       | IFSM   | 150         |          | Amp              |
| Operating Junction Temperature                         | $T_j$  | -65 to +125 |          | $^\circ\text{C}$ |
| Storage Temperatures                                   | TSTG   | -65 to +125 |          | $^\circ\text{C}$ |

Specification apply to die only. Actual performance may degrade when assembled.

MEMT does not guarantee device performance after assembly.

Data sheet information is subjected to change without notice.

**DICE OUTLINE DRAWING**


| DIM | ITEM               | $\mu\text{m}^2$ | Mil <sup>2</sup> |
|-----|--------------------|-----------------|------------------|
| A   | Die Size           | 1838            | 72.36            |
| B   | Top Metal Pad Size | 1738            | 68.4             |
| C   | Passivation Seal   | 1758            | 69.2             |
| D   | Thickness (Min)    | 254             | 10               |
|     | Thickness (Max)    | 305             | 12               |

**PS:**

(1)Cutting street width is around 80 $\mu\text{m}$ (3.14mil).

(2)Both of top-side and back-side metals are Ti/Ni/Ag.