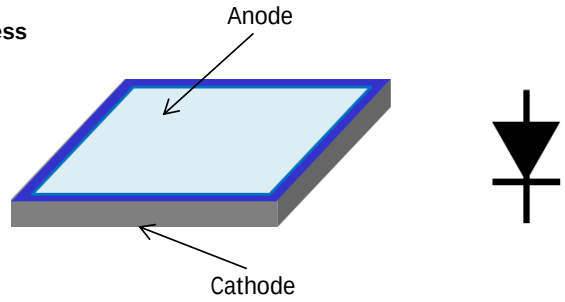
# YJ Planar Schottky Barrier Diode Die Specification

**45V 15A, 138mil, Schottky barrier diode die based on silicon planar process**
**Part No.: PSB138M045SS-290A**




**Main Products Characterstics**

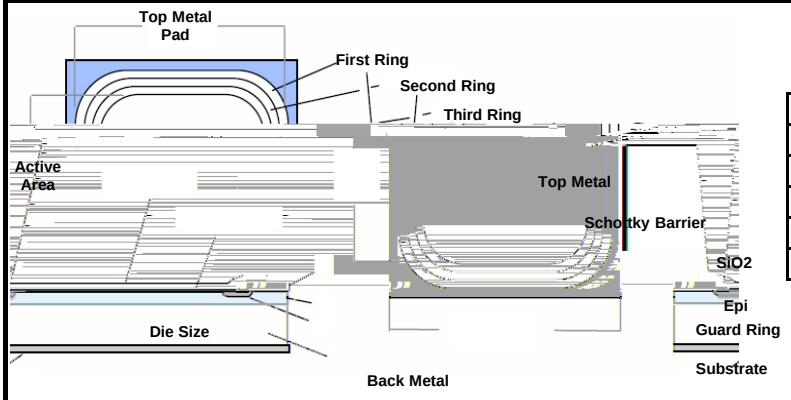
**Maximum Ratings**

| Parameter | Symbol | Rating |
|---|---|---|
| Repetitive peak reverse voltage | $V_{RRM}$ | 45 V |
| Average forward current | $I_{F(AV)}$ | 15 A |
| current (tp = 8.3 ms, halfwave, 1 cycle) | $I_{FSM}$ | 320 A |
| Storage temperature range | $T_{stg}$ | -50 to +150 °C |
| Maximum operating junction temperature | $T_j$ | 150 °C |

**Static Electrical Characteristics (Ta = 25°C)**

| Parameter | Symbol | Value | |
|---|---|---|---|
| | | Spec | Typical |
| Reverse breakdown voltage $I_R$ = 1mA | $V_{BR}$ | 50 V | 54V |
| Maximum forward voltage drop $I_F$ = 15 A 2% | $V_F$ | 0.50V | 0.46V |
| Maximum reverse current $V_R = V_{RRM}$ 2% | $I_R$ | 150uA | 90uA |

**Device Schematics and Outline Drawing**




| | |
|---|---|
| Die Thickness * | 11.4 Mils |
| Die Size ** | 138 Mils |
| Top Metal Pad | 133 Mils |
| Active Area | 129 Mils |
| Top Metal | Ag |
| Back Metal | Ag |

Note: 1 * : Also can offer device with 8 mils thickness
2 **: Cutting street width is around 1.5 mils

**Important Notice**

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

*Yangjie Electronics* does not guarantee device performance after assembly.
All operating parameters must be validated for each customer application by customer's technical experts.

Data sheet information is subjected to change without notice.

Recommended Storage Environment:

Store in original container, in dessicated nitrogen, with no contamination.

Shelf life for parts stored in above condition is 2 years.

If the storage is done in normal atmosphere shelf life is reduced to 6 months.