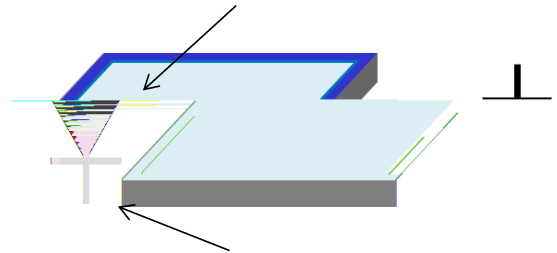


# YJ Planar Schottky Barrier Diode Die Specification

100V 2A, 45mil, Schottky barrier diode die based on silicon planar process  
 Part No.: PSB045S100SS-280A



## Main Products Characteristics

### Maximum Ratings

Parameter	Symbol	Rating
Repetitive peak reverse voltage	$V_{RRM}$	100 V
Average forward current	$I_{F(AV)}$	2 A
( $t_p = 8.3$ ms, halfwave, 1 cycle)	$I_{FSM}$	50 A
Storage temperature range	$T_{stg}$	-50 to +175 °C
Maximum operating junction temperature	$T_j$	175 °C

### Static Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	
		Spec	Typical
Reverse breakdown voltage $I_R = 1\text{mA}$	$V_{BR}$	105 V	120V
Maximum forward voltage drop $I_F = 2\text{A}$ 2%	$V_F$	0.82V	0.78V
Maximum reverse current $V_R = V_{RRM}$ 2%	$I_R$	5uA	0.3uA

## Device Schematics and Outline Drawing

Labels in diagram: Top Metal Pad, First Ring, Second Ring, Third Ring, Active Area, Top Metal, Schottky Barrier, SiO2, Epi, Guard Ring, Substrate, Back Metal, Die Size.

Die Thickness *	11 Mils
Die Size **	45 Mils
Top Metal Pad	40 Mils
Active Area	36 Mils
Top Metal	Ag
Back Metal	Ag

## Important Notice

<p>Specification apply to die only. Actual performance may degrade when assembled.</p> <p>does not guarantee device performance after assembly.</p> <p>All operating parameters must be validated for each customer application by customer's technical experts.</p> <p>Data sheet information is subjected to change without notice.</p>	<p>Recommended Storage Environment:</p> <p>Store in original container, in dessicated nitrogen, with no contamination.</p> <p>Shelf life for parts stored in above condition is 2 years.</p> <p>If the storage is done in normal atmosphere shelf life is reduced to 6 months.</p>
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