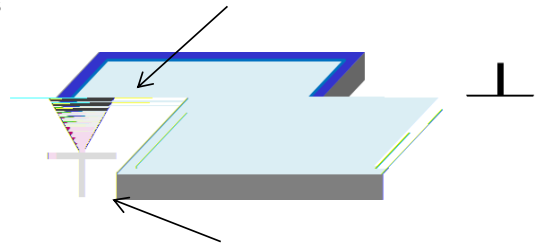


# YJ Planar Schottky Barrier Diode Die Specification

40V 20A, 102mil, Schottky barrier diode die based on silicon planar process  
 Part No.: PSB102M045AS-280A



## Main Products Characteristics

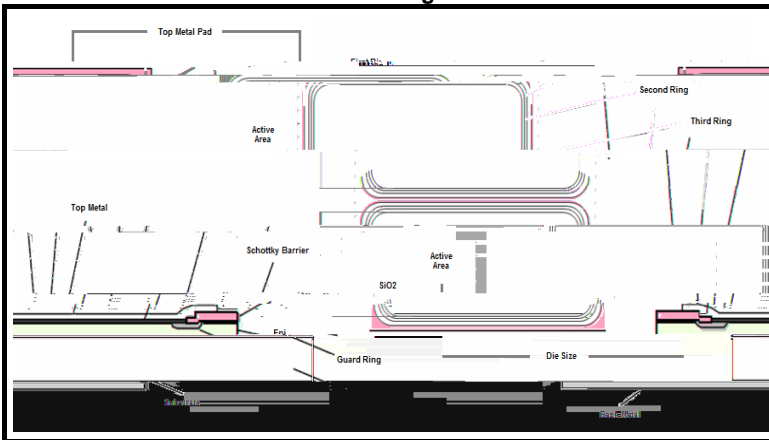
### Maximum Ratings

Parameter	Symbol	Rating
Repetitive peak reverse voltage	$V_{RRM}$	40 V
Average forward current	$I_{F(AV)}$	20 A
current ( $t_p = 8.3$ ms, halfwave, 1 cycle)	$I_{FSM}$	170 A
Storage temperature range	$T_{stg}$	-50 to +150 °C
Maximum operating junction temperature	$T_j$	150 °C

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

Parameter	Symbol	Value	
		Spec	Typical
Reverse breakdown voltage $I_R = 1\text{mA}$	$V_{BR}$	45 V	52V
Maximum forward voltage drop $I_F = 20$ A 2%	$V_F$	0.65V	0.58V
Maximum reverse current $V_R = V_{RRM}$ 2%	$I_R$	70uA	30uA

## Device Schematics and Outline Drawing



Die Thickness *	11 Mils
Die Size **	102 Mils
Top Metal Pad	2*48.6*98 Mils
Active Area	2*43.8*93.4 Mils
Space between die	0.98 Mils
Top Metal	AL
Back Metal	Ag

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

## 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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