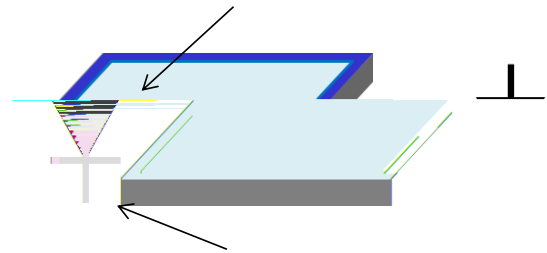


# YJ Planar Schottky Barrier Diode Die Specification

30V 0.5A, 23mil, Schottky barrier diode die based on silicon planar process  
 Part No.: PSB023L030AS-180A



## Main Products Characteristics

- Average forward current:  $I_{F(AV)} = 0.5 \text{ A}$
- Maximum operating junction temperature:  $T_j = 125 \text{ }^\circ\text{C}$
- ESD rating: >2KV, per IEC61000-4-2 (Contact Discharge)
- Top metal: AL/3.5um

## Maximum Ratings

Parameter	Symbol	Rating
Repetitive peak reverse voltage	$V_{RRM}$	30 V
Average forward current	$I_{F(AV)}$	0.5 A
Non-repetitive peak surge current ( $t_p = 8.3 \text{ ms}$ , halfwave, 1 cycle)	$I_{FSM}$	10 A
Storage temperature range	$T_{stg}$	-50 to +125 $^\circ\text{C}$
Maximum operating junction temperature	$T_j$	125 $^\circ\text{C}$

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

Parameter	Symbol	Value	
		Spec	Typical
Reverse breakdown voltage $I_R = 0.1 \text{ mA}$	$V_{BR}$	40 V	44V
Maximum forward voltage drop $I_F = 0.01\text{A}/0.1\text{A}/0.2\text{A}/0.5\text{A}$ Pulse Test: $t_p = 300 \mu\text{s}$ , 2%	$V_F$	0.3V/0.36V/ 0.45V/0.46V	0.28V/0.35V/ 0.39V/0.44V
Maximum reverse current $V_R = 25\text{V}$ Pulse Test: $t_p = 300 \mu\text{s}$ , 2%	$I_R$	50uA	3.5uA

## Device Schematics and Outline Drawing

Die Thickness *	180um
Die Size **	23 Mils
Top Metal Pad	20.2 Mils
Active Area	17.6 Mils
Top Metal	AL/3.5um
Back Metal	Ag/1.5um

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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