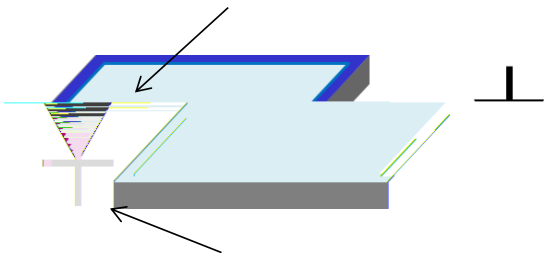


YJ Planar Schottky Barrier Diode Die Specification

40V 2A, 45mil, Schottky barrier diode die based on silicon planar process
Part No.: PSB045S040SS-280A



Main Products Characteristics

Maximum Ratings

Parameter	Symbol	Rating
Repetitive peak reverse voltage	V_{RRM}	40 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}	45 V	52V
Maximum forward voltage drop $I_F = 2\text{ A}$ $\leq 2\%$	V_F	0.62V	0.58V
Maximum reverse current $V_R = V_{RRM}$ $\leq 2\%$	I_R	5uA	1uA

Device Schematics and Outline Drawing

Top Metal Pad

First Ring

Second Ring

Third Ring

Active Area

Die Size

Back Metal

Top Metal

Schottky Barrier

SiO2

Epi

Guard Ring

Substrate

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