YJ Planar Schottky Barrier Diode Die Specification

100V 3A, 50mil, Schottky barrier diode die based on silicon planar process
Part No.: PSB050H100SS-280A

Main Products Characterstics

- Average forward current: IF(AV) = 3 A
- Maximum operating junction temperature: Tj = 175 °C
- ESD rating: >2KV, per IEC61000-4-2 (Contact Discharge)
- Top metal: Ag

Maximum Ratings

Parameter	Symbol	
Repetitive peak reverse voltage	V_{RRM}	100 V
Average forward current	$I_{F(AV)}$	3 A
Non−repetitive peak surge current (tp = 8.3 ms, halfwave, 1 cycle)	I_{FSM}	80 A
Storage temperature range	T_{stg}	-50 to +175 °C
Maximum operating junction temperature	T_j	175 °C

Static Electrical Characteristics (Ta = 25°C)

	Symbol	Value	
		Spec	Typical
Reverse breakdown voltage I_R = 1mA		105 V	120V
Maximum forward voltage drop I_F = 3 A Pulse Test: tp = 300 μs, δ ≤ 2%	V_F	0.83V	0.80V
		5uA	0.3uA

Device Schematics and Outline Drawing

Die Thickness *	11 Mils
Die Size **	
Top Metal Pad	46 Mils
Active Area	42 Mils
Top Metal	Ag
Back Metal	

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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