YJ Planar Schottky Barrier Diode Die Specification

15V 40A, 230mil, Schottky barrier diode die based on silicon planar process

Part No.: PSB230L015AS-290A

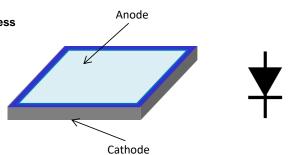
Main Products Characterstics

• Average forward current: IF(AV) = 40A

• Maximum operating junction temperature: Tj = 125 °C

• ESD rating: >8KV, per IEC61000-4-2 (Contact Discharge)

• Top metal: AL



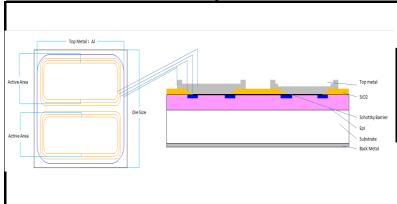
Maximum Ratings

Parameter	Symbol	Rating	
Repetitive peak reverse voltage	V_{RRM}	15 V	
Average forward current	$I_{F(AV)}$	40A	
Non-repetitive peak surge current (tp = 8.3 ms, halfwave, 1 cycle)	I _{FSM}	120 A	
Storage temperature range	T _{stg}	-50 to +125 °C	
Maximum operating junction temperature	T _j	125 °C	

Static Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Value	
Parameter		Spec	Typical
Reverse breakdown voltage $I_R = 1 \text{mA}$	V_{BR}	15V	34V
Maximum forward voltage drop			
I _F = 40A	V_{F}	0.5V	0.42V
Pulse Test: tp = 300 μ s, $\delta \le 2\%$			
Maximum reverse current			
$V_R = 15V$	I _R	5mA	100uA
Pulse Test: tp = 300 μ s, $\delta \le 2\%$			

Device Schematics and Outline Drawing



Die Thickness *	11.4 Mils
Die Size **	230 Mils
Top Metal Pad	227*112 Mils
Active Area	218*105 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

Specification apply to die only. Actual performance may degrade when assembled.

Yangjie Electronics 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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