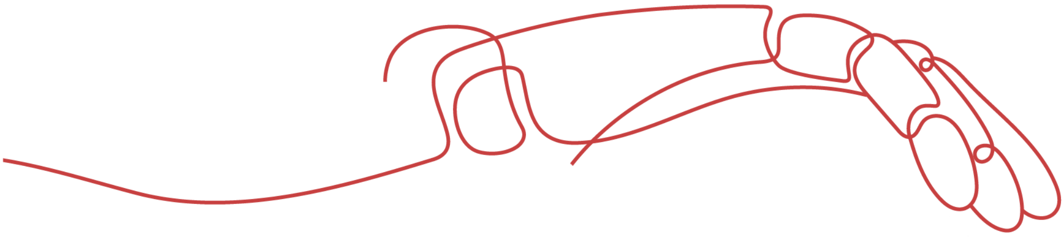
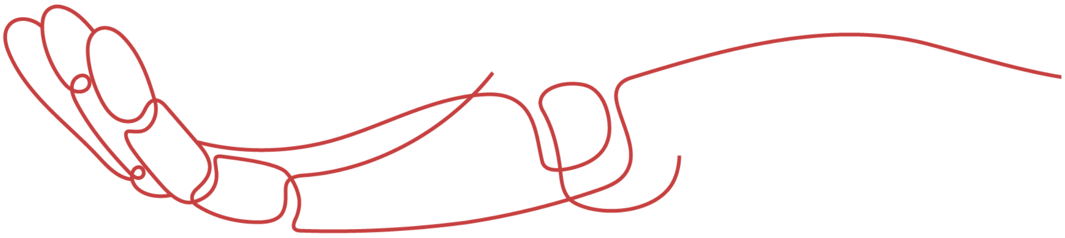
JG® Techology



PRODUCT DATA SHEET



To learn more about JGSEMI, please visit our website at

Datasheet Resources Samples

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

B5817W/B5818W/B5819W

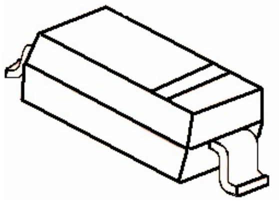
SOD-123 Plastic-Encapsulate Schottky Barrier Diode

Features

- High Current Capability
- Low Forward Voltage Drop

Mechanical Data

- SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any



SOD-123

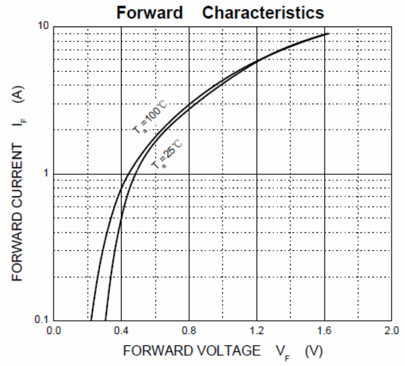
Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

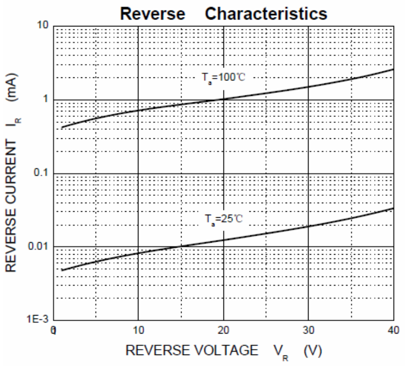
Parameters	Symbol	**B5817W**	**B5818W**	**B5819W**	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Maximum average forward rectified current	I_{FM}	1.0			A
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	9			A
Typical thermal resistance	$R_{\theta JA}$	250			℃/W
Power Dissipation	P_D	500			㎽
Storage temperature range	T_{STG}	-50-+150			℃

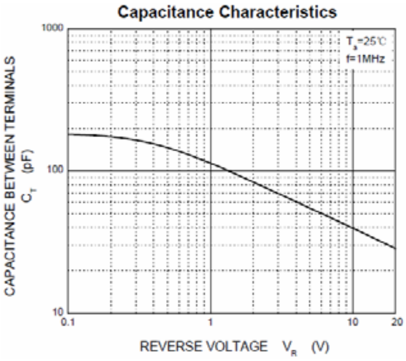
Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

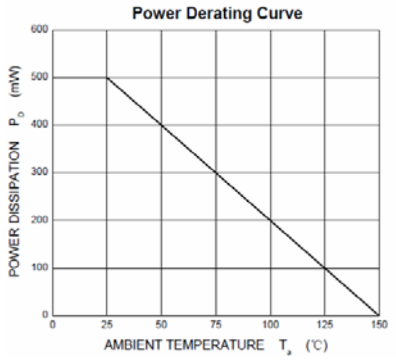
Parameters	Symbol	Test conditions	**B5817W**	**B5818W**	**B5819W**	单位 Unit
Maximum forward voltage	V_F	IF = 1.0A IF = 3.0A	0.480 0.750	0.550 0.875	0.600 1.000	V
Maximum reverse breakdown voltage	VR	IR=1mA	20	30	40	V
Maximum reverse current	I_R	VR=20V B5817W VR=30V B5818W VR=40V B5819W	1.0			mA
Type junction capacitance	Cj	VR = 4.0V, f = 1MHz	110			pF

Characteristic Curves

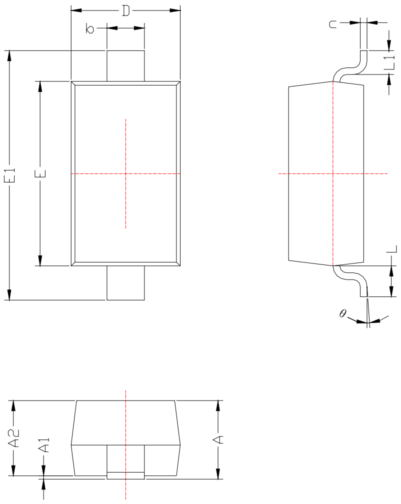








SOD-123 PACKAGE OUTLINE Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°

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