HAICHUANG SEMI

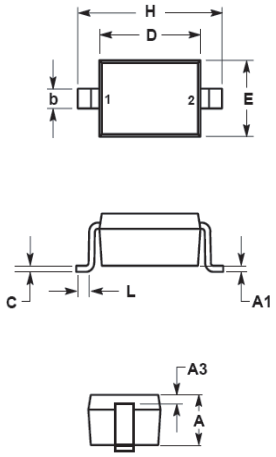
B5817WS/B5818WS/B5819WS

40V/1A SCHOTTKY BARRIER DIODE

Features

- Low Forward Voltage Drop.
- Surface Mounted Device.
- Pb free and RoHS compliant.

DEVICE	MARKING
B5817WS	SJ
B5818WS	SK
B5819WS	SL



SOD-323		
Dim.	Min.	Max.
A	0.80	1.10
A1	0.00	0.10
A3	0.15 REF	
B	0.25	0.40
C	0.10	0.15
D	1.60	1.80
E	1.15	1.35
L	0.20	0.50
H	2.30	2.80
Dimensions in millimeter		

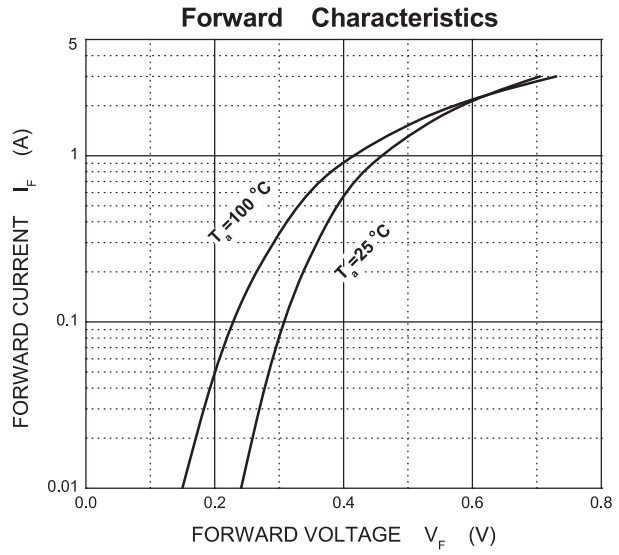
Maximum Ratings @ T_A = 25°C unless otherwise specified

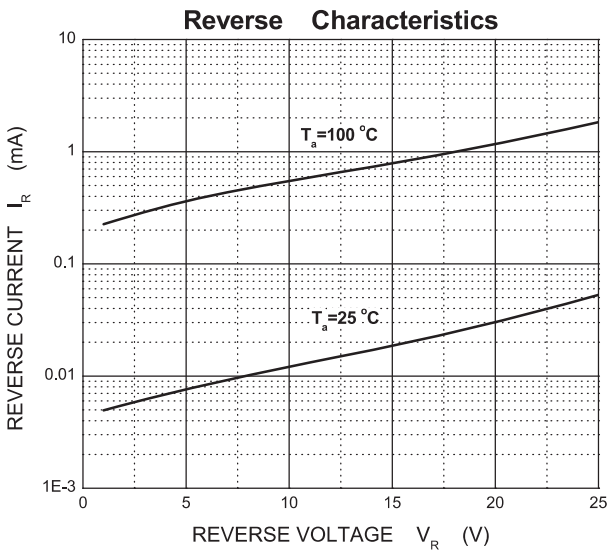
Parameters	Symbol	B5817WS	B5818WS	B5819WS	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Maximum average forward rectified current	I_{FM}	1.0			A
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	9			A
Typical thermal resistance	$R_{\theta JA}$	400			℃/W
Power Dissipation	PD	250			mW
Operating junction temperature	Tj	125			℃
Storage temperature range	T_{STG}	-50-+150			℃

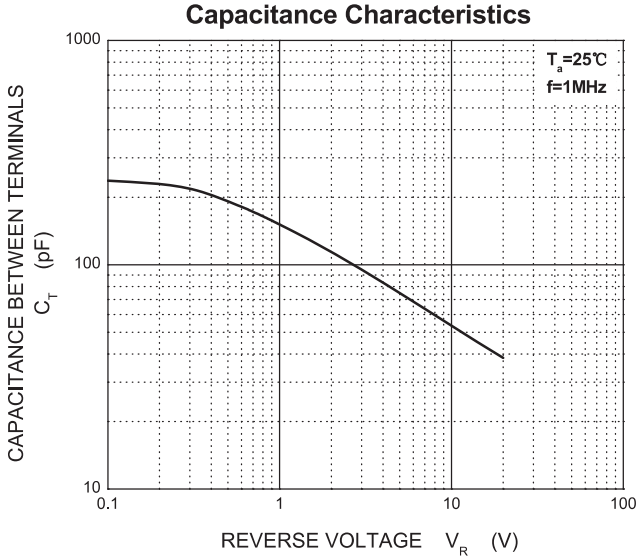
Electrical Characteristics @ T_A = 25°C unless otherwise specified

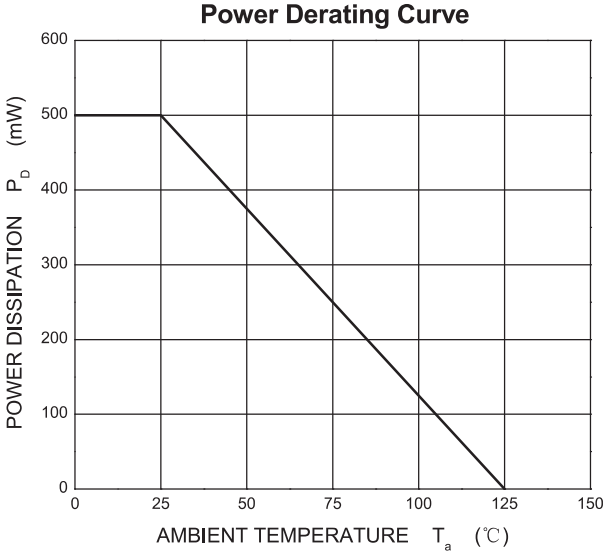
Parameters	Symbol	Test conditions	B5817WS	B5818WS	B5819WS	Unit
Maximum forward voltage	V_F	IF = 1.0A IF = 3.0A	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum reverse breakdown voltage	VR	IR=1mA	20	30	40	V
Maximum reverse current	I_R	VR=20V B5817WS VR=30V B5818WS VR=40V B5819WS	1.0			mA
Type junction capacitance	Cj	VR = 4.0V, f = 1MHz	120			pF

TYPICAL TRANSIENT CHARACTERISTICS — B5817WS

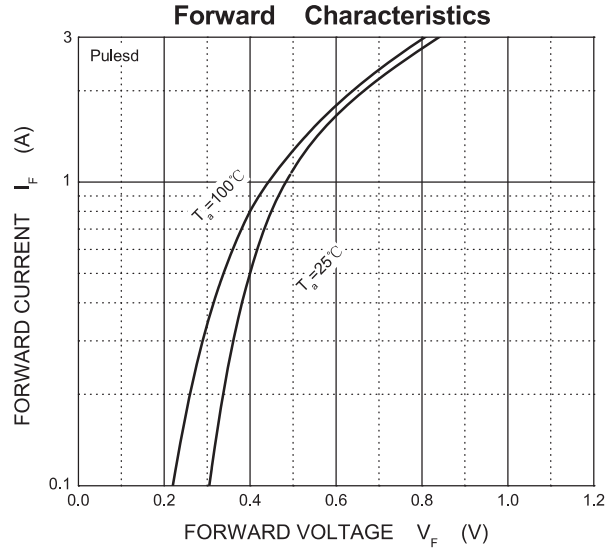


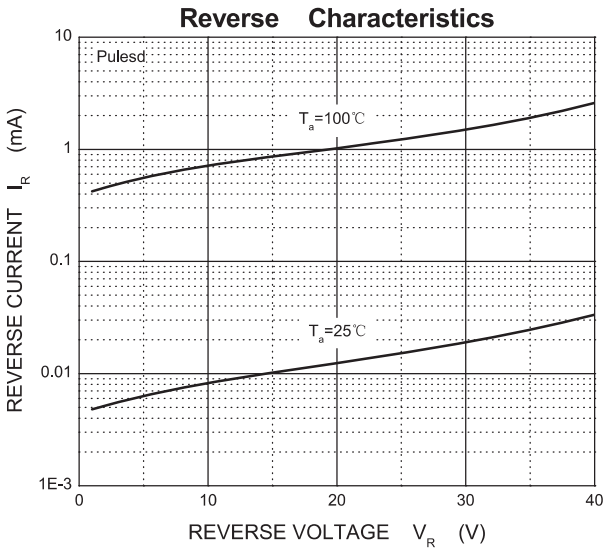


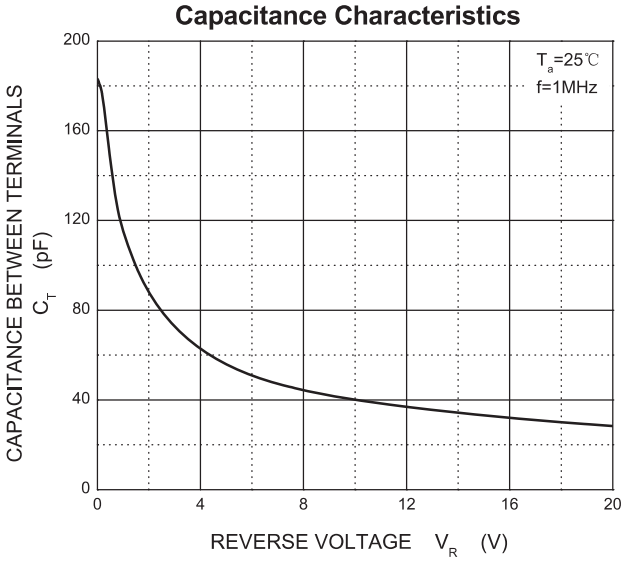


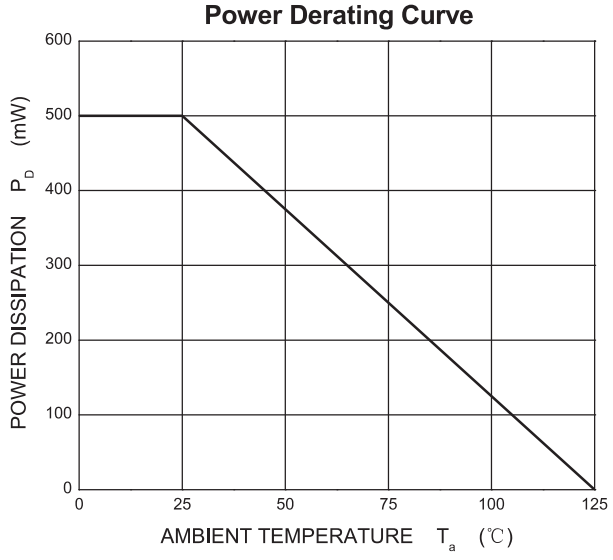


TYPICAL TRANSIENT CHARACTERISTICS B5818WS

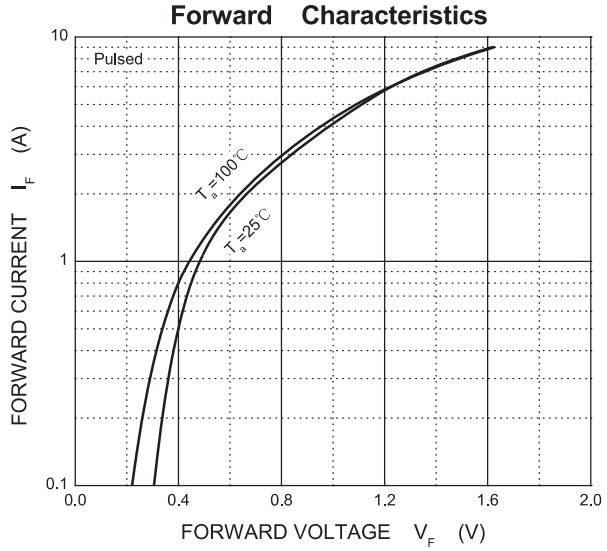


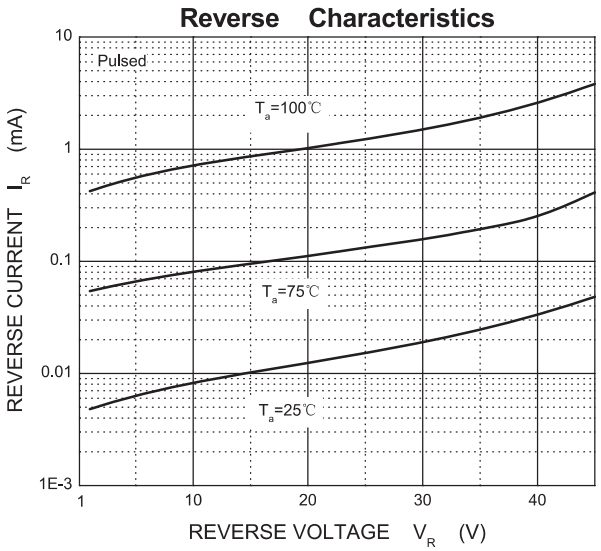


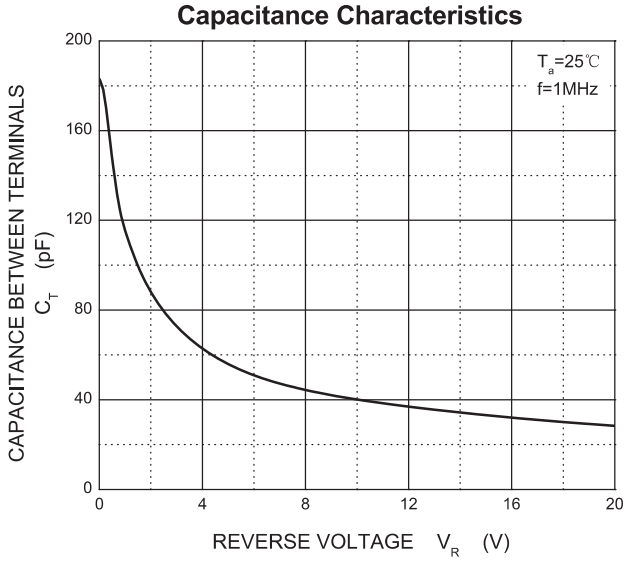


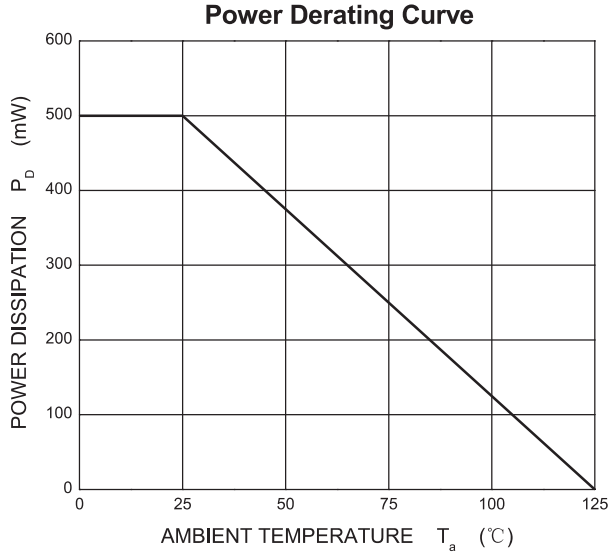


TYPICAL TRANSIENT CHARACTERISTICS — B5819WS









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