HAICHUANG SEMI

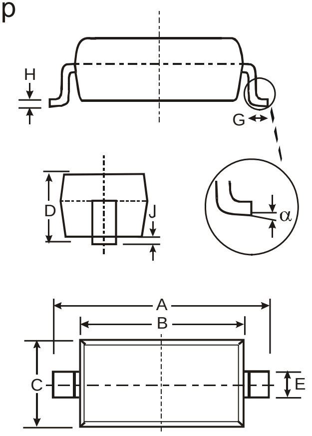
1N5817W-1N5819W

1A SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- High Current Capability and Low Forward Voltage Drop
- Low Power Loss,High Efficiency.
- High Surge Capability.
- For Use in Low Voltage,High Frequency Inverters. Free Wheeling,and Polarity Protection Application

DEVICE	MARKING
1N5817W	SJ
1N5818W	SK
1N5819W	SL



SOD-123		
Dim	**Min**	**Max**
A	3.55	3.85
B	2.55	2.85
C	1.40	1.70
D	—	1.35
E	0.45	0.65
	0.55 Typical	
G	0.25	—
H	0.11 Typical	
J	—	0.10
α	0°	8°
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

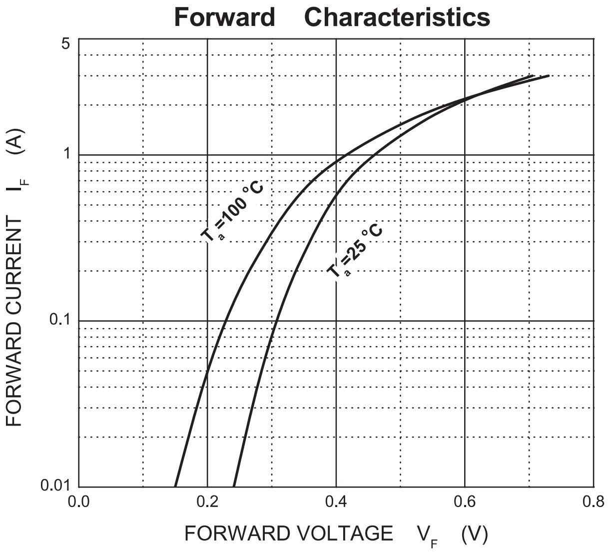
Parameter	Symbol	Value	Unit
Reverse Voltage 1N5817W 1N5818W 1N5819W	V_R	20 30 40	V
Average Forward Rectified Current	I_O	1	A
Non-Repetitive Peak Forward Surge Current (8.3 ms Single Half Sine-Wave)	I_{FSM}	25	A
Power Dissipation	P_{tot}	450	mW
Operating and Storage Temperature Range	T_j ,T_S	- 55 to + 125	°C

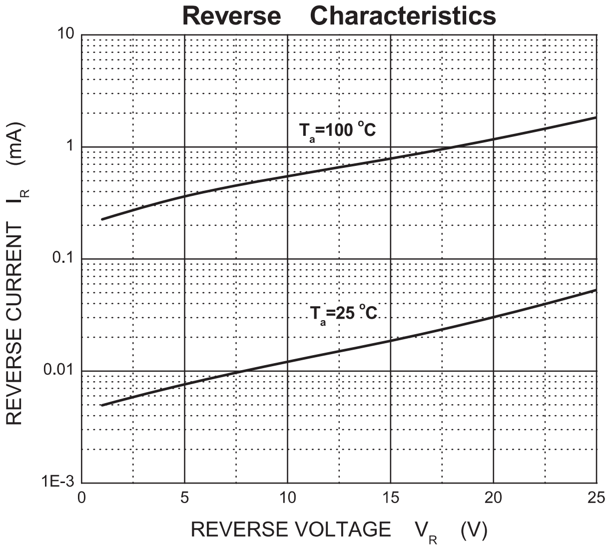
Electrical Characteristics @ T_A = 25°C unless otherwise specified

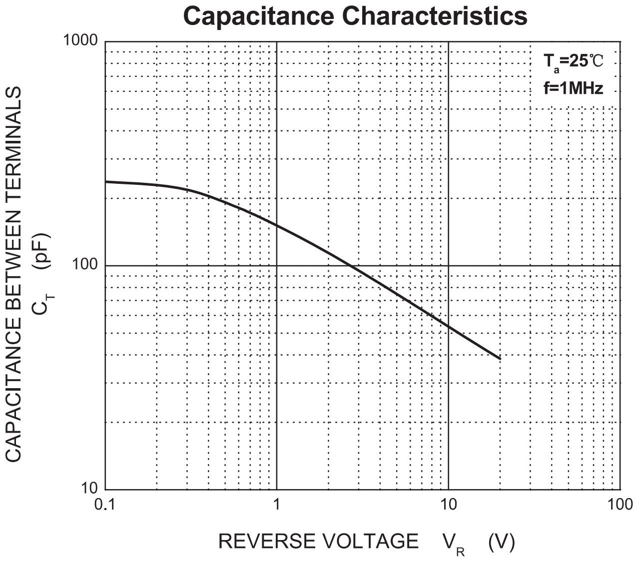
Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 1 mA 1N5817W 1N5818W 1N5819W	V_{BR}	20 30 40	- - -	V
Reverse Voltage Leakage Current at V_R = 20 V 1N5817W at V_R = 30 V 1N5818W at V_R = 40 V 1N5819W at V_R = 4 V 1N5819W at V_R = 6 V 1N5819W	I_R	- - - - -	1 1 1 0.05 0.075	mA
Forward Voltage at I_F = 0.1 A 1N5819W at I_F = 1 A 1N5817W 1N5818W 1N5819W at I_F = 3 A 1N5817W 1N5818W 1N5819W	V_F	- - - - - - -	0.45 0.45 0.55 0.6 0.75 0.875 0.9	V
Diode Capacitance at V_R = 4 V, f = 1 MHz	C_D	-	120	pF

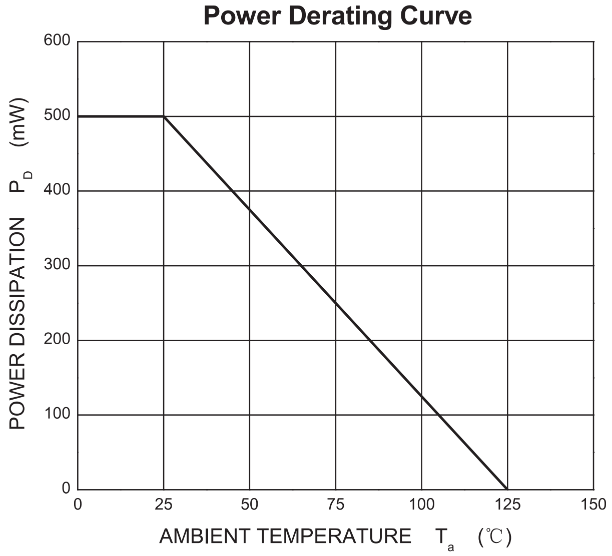
TYPICAL TRANSIENT CHARACTERISTICS

1N5817W

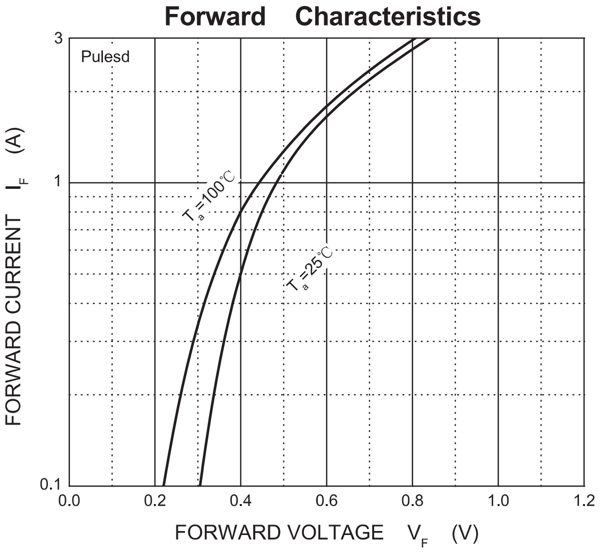


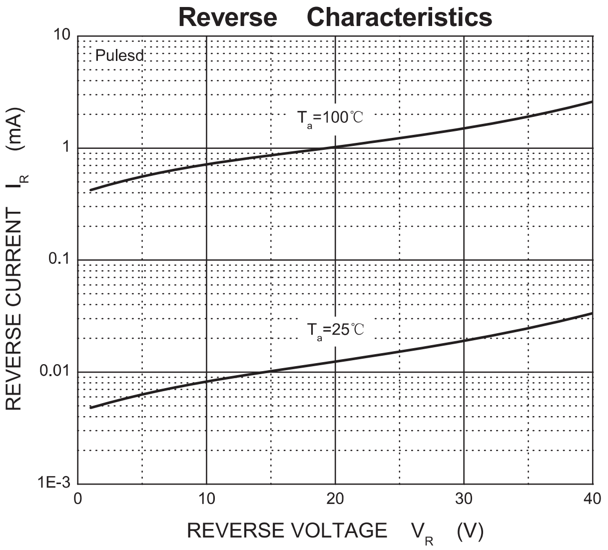


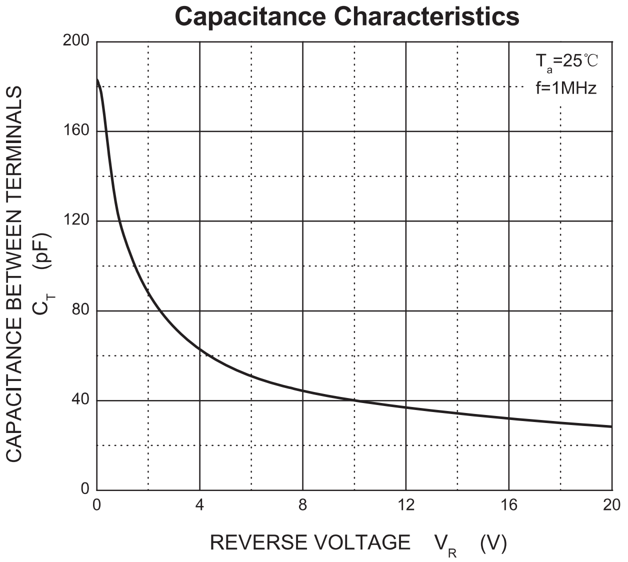


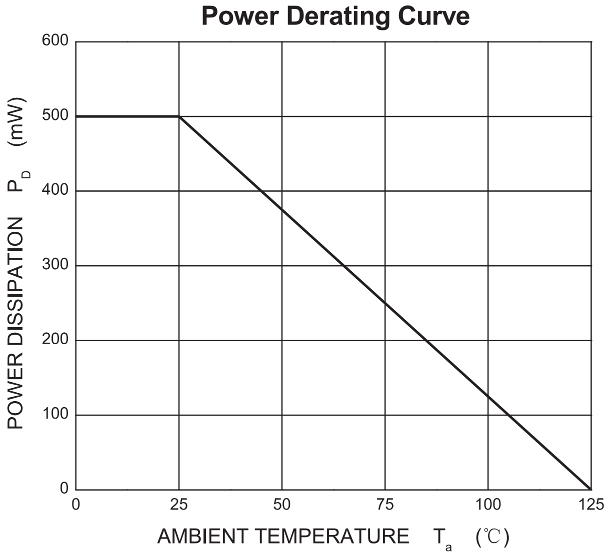


TYPICAL TRANSIENT CHARACTERISTICS **1N5818W**

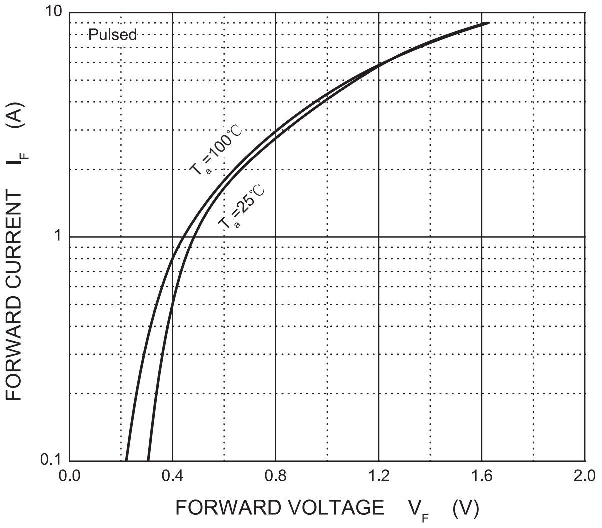


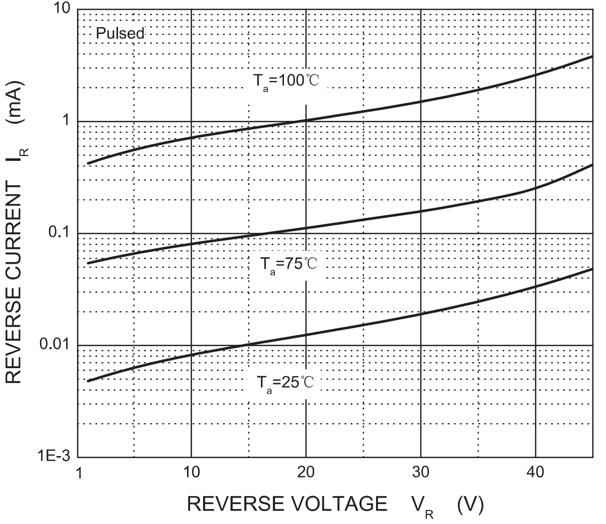


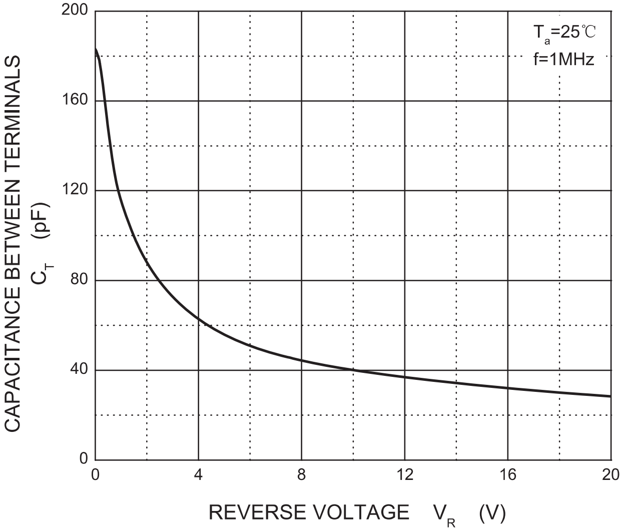


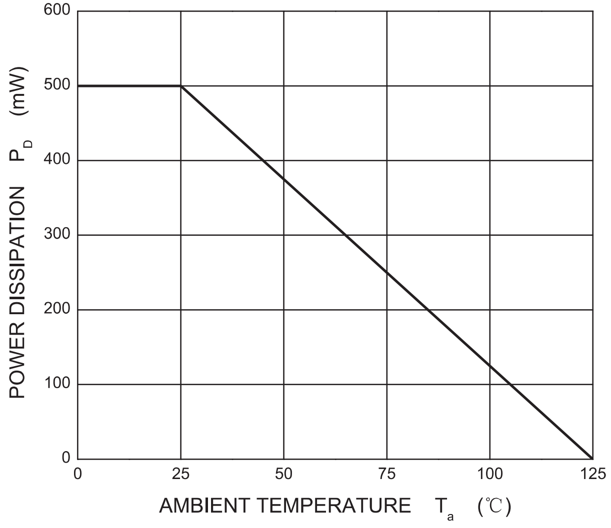


TYPICAL TRANSIENT CHARACTERISTICS **1N5819W**


Forward Characteristics


Reverse Characteristics


Capacitance Characteristics


Power Derating Curve

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