



Micro Commercial Components



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B5817W Thru B5819W

Features

- Halogen free available upon request by adding suffix "-HF"
- Guard Ring Protection
- Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters
- Power Dissipation:250mW
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

- Operating Temperature: -65°C to +125°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 500°C/W Junction To Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
B5817W	SJ	20V	14V	20V
B5818W	SK	30V	21V	30V
B5819W	SL	40V	28V	40V

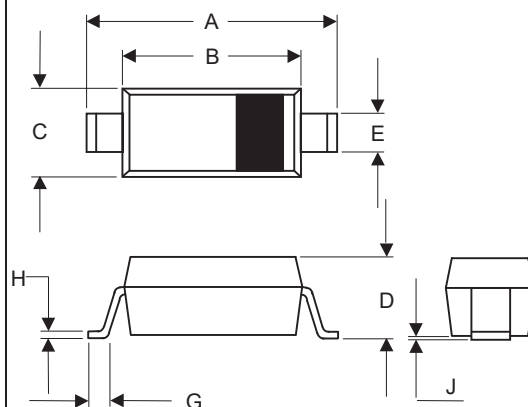
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_c = 90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	10A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	0.45V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}$ (Note 1)
B5817W		0.55V	
B5818W		0.60V	$I_{FM} = 3\text{A};$ $T_J = 25^\circ\text{C}$ (Note 1)
B5819W		0.75V	
Reverse leakage current	I_R	200 μA (Max) 30 μA (Typ.)	$V_R=20\text{V}, T_a=25^\circ\text{C}$
B5818W		40 μA (Max) 4 μA (Typ.)	$V_R=30\text{V}, T_a=25^\circ\text{C}$
B5819W		40 μA (Max) 7 μA (Typ.)	$V_R=40\text{V}, T_a=25^\circ\text{C}$
Typical junction capacitance	C_J	120pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

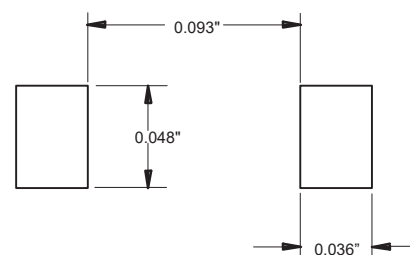
Notes: 1. Pulse Test: Pulse Width 300usec, Duty Cycle 2%

1 Amp Schottky Barrier Rectifier 20 - 40 Volts

SOD-123



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	



B5817W-B5819W

Typical Characteristics

Fig. 1 - Forward Current Derating Curve

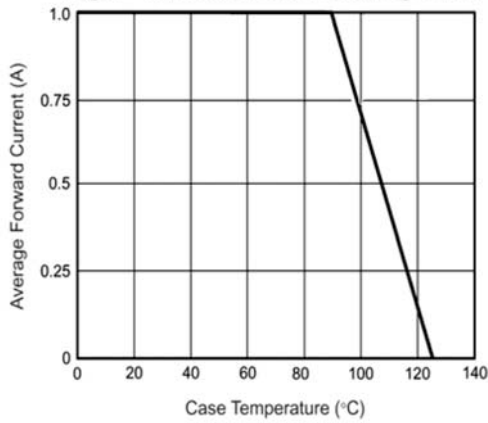


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

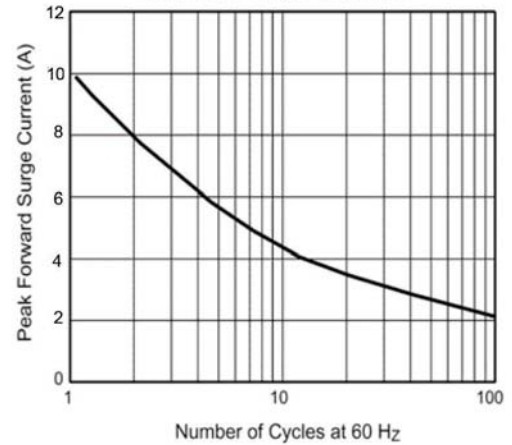


Fig. 3 - Typical Instantaneous Forward Characteristics

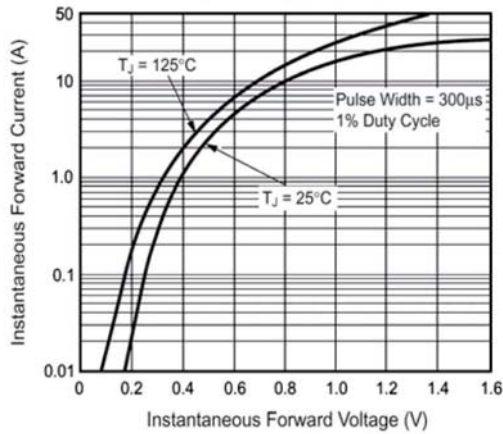


Fig. 4 - Typical Reverse Characteristics

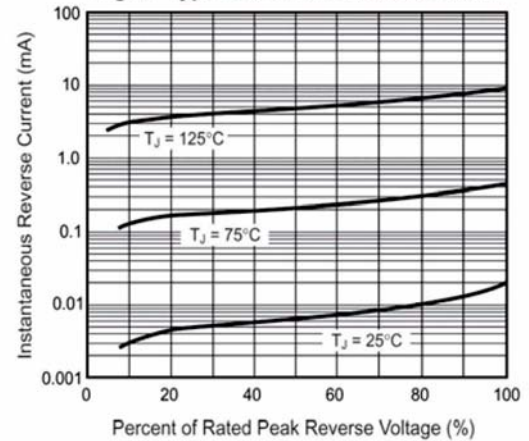


Fig. 5 - Typical Junction Capacitance

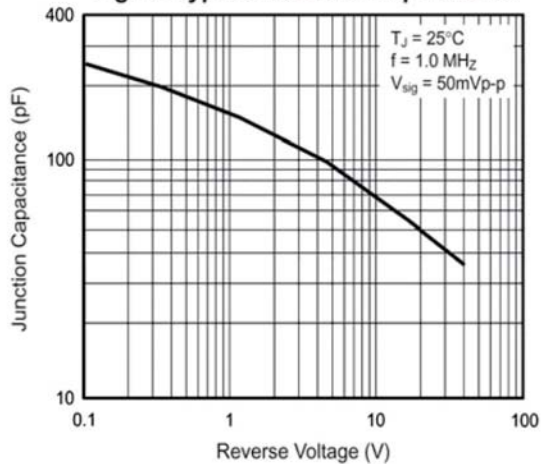
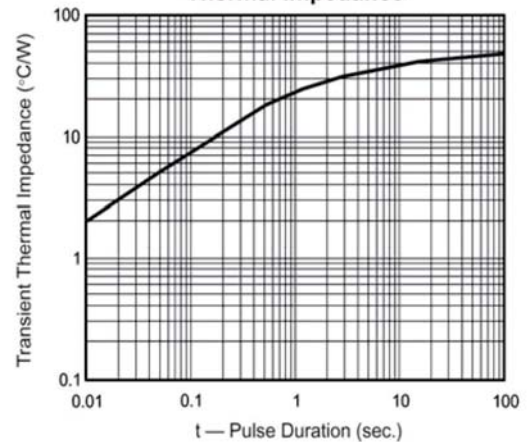


Fig. 6 - Typical Transient Thermal Impedance





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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

- Halogen free available upon request by adding suffix "-HF"

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