Micro Commercial Components

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B5817WS Thru B5819WS

1 Amp Schottky Barrier Rectifier 20 - 40 Volts

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
- High Surge Current Capability
- 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℃ to +125℃
- Storage Temperature: -65℃ to +150℃
- Maximum Thermal Resistance; 500℃/W Junction To Ambient

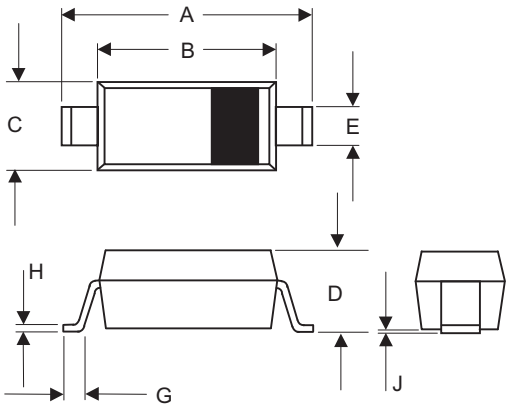
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
B5817WS	SJ	20V	14V	20V
B5818WS	SK	30V	21V	30V
B5819WS	SL	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_c = 90℃
Peak Forward Surge Current	I_{FSM}	10A	8.3ms, half sine
Power Dissipation	P_d	250mW	
Maximum Instantaneous Forward Voltage	V_F	0.45V 0.55V 0.60V	I_{FM} = 1.0A; T_J = 25℃ (Note 1)
B5817WS B5818WS B5819WS		0.75V 0.875V 0.90V	I_{FM} = 3A; T_J = 25℃(Note 1)
Reverse leakage current	I_R		
B5817WS		200μA(Max) 30μA(Typ.)	VR=20V,Ta=25℃
B5818WS		40μA(Max) 4μA(Typ.)	VR=30V,Ta=25℃
B5819WS		40μA(Max) 7μA(Typ.)	VR=40V,Ta=25℃
Typical junction capacitance	C_J	120pF	Measured at 1.0MHz , V_R=4.0V

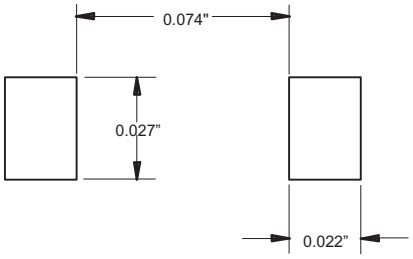
Notes: 1. Pulse Test: Pulse Width 300usec, Duty Cycle 2%

SOD-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT



Typical Characteristics

Fig. 1 - Forward Current Derating Curve

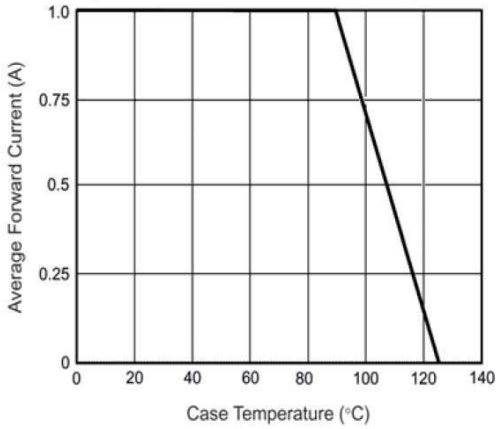


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

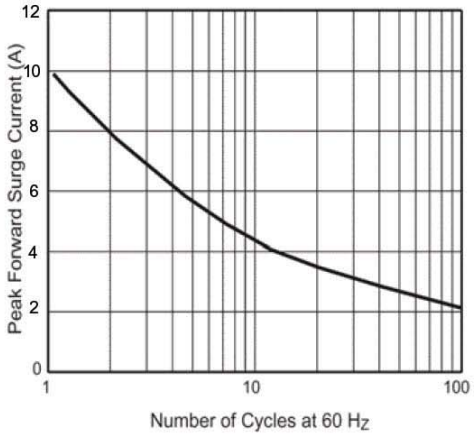


Fig. 3 - Typical Instantaneous Forward Characteristics

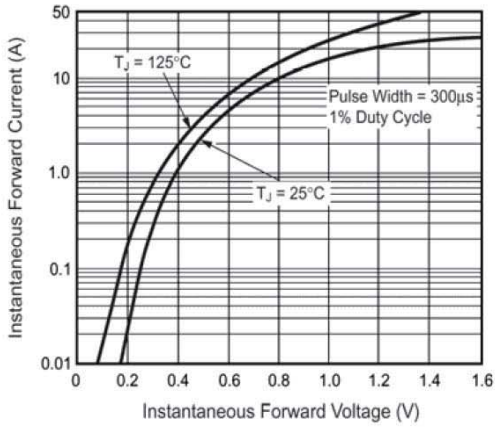


Fig. 4 - Typical Reverse Characteristics

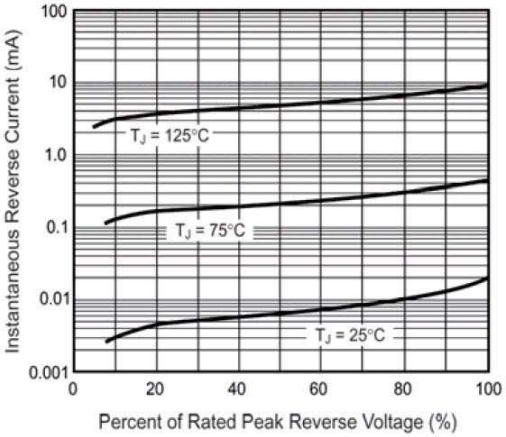


Fig. 5 - Typical Junction Capacitance

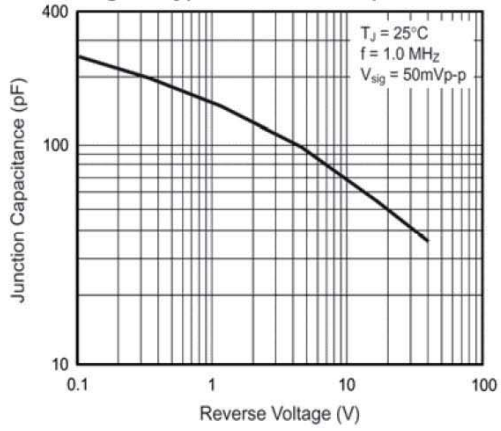


Fig. 6 - Typical Transient Thermal Impedance

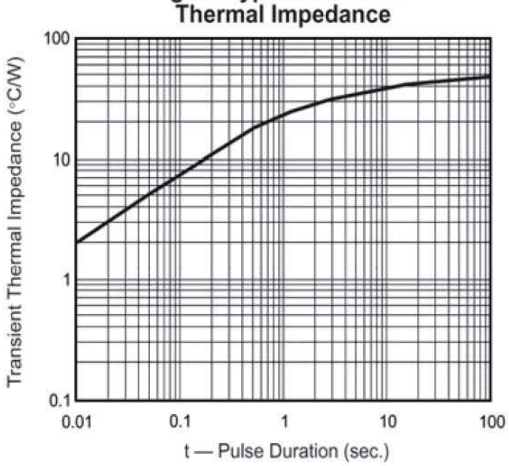
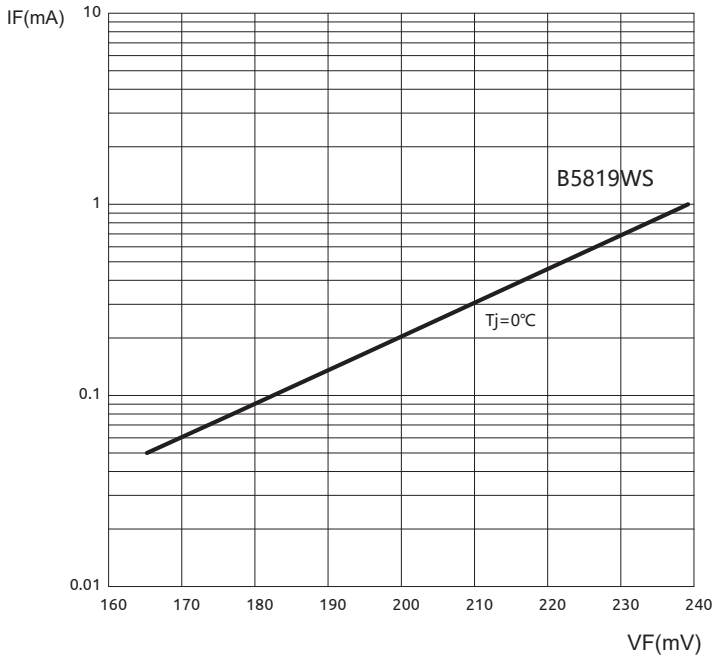


Fig7. Forward Characteristics



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Ordering Information :

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

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