

**M.C.C.**

Micro Commercial Components™

Micro Commercial Components
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B5817WS
Thru
B5819WS

Features

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

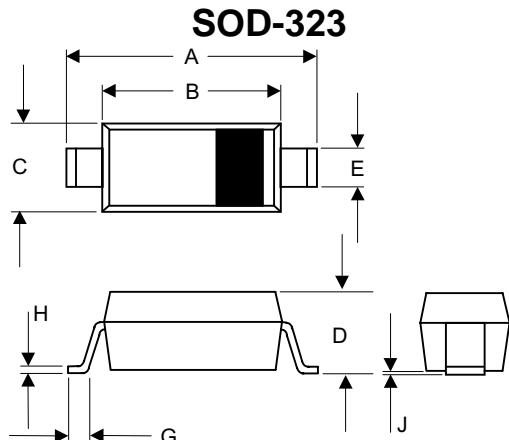
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
B5817WS	SJ	20V	14V	20V
B5818WS	SK	30V	21V	30V
B5819WS	SL	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_c = 90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	10A	8.3ms, half sine
Maximum Instantaneous Forward Voltage B5817WS B5818WS B5819WS	V_F	0.45V 0.55V 0.60V	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}$ (Note 1)
		0.75V 0.875V 0.90V	$I_{FM} = 3\text{A}; T_J = 25^\circ\text{C}$ (Note 1)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1mA	$T_A = 25^\circ\text{C}$
Typical junction capacitance	C_J	120pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

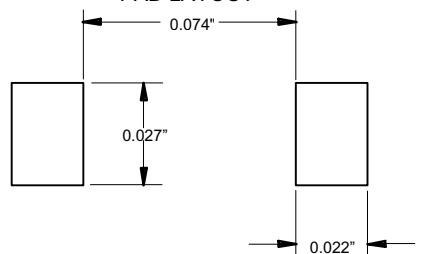
Notes: 1. Pulse Test: Pulse Width 300usec, Duty Cycle 2%

**1 Amp Schottky Barrier Rectifier
20 - 40 Volts**



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



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B5817WS-B5819WS

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Typical Characteristics

Fig. 1 - Forward Current Derating Curve

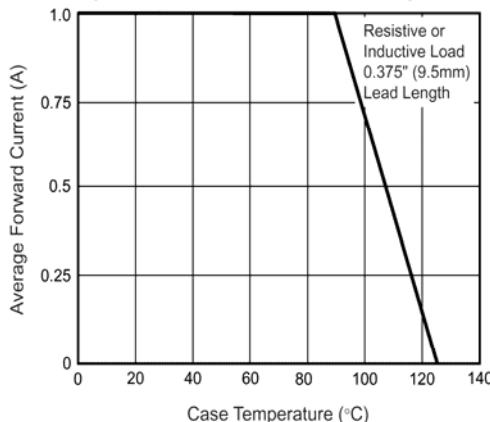


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

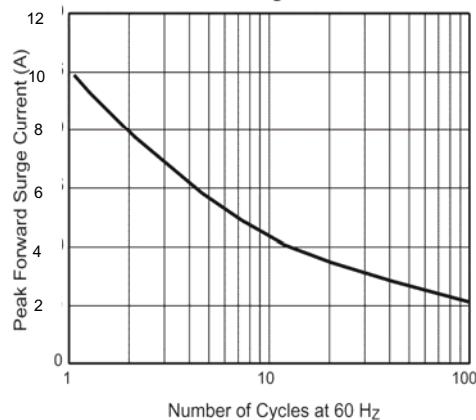


Fig. 3 - Typical Instantaneous Forward Characteristics

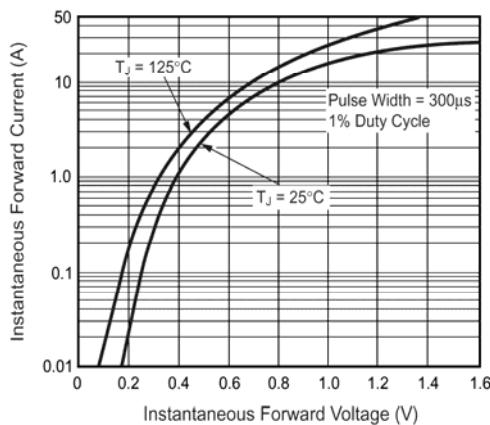


Fig. 4 - Typical Reverse Characteristics

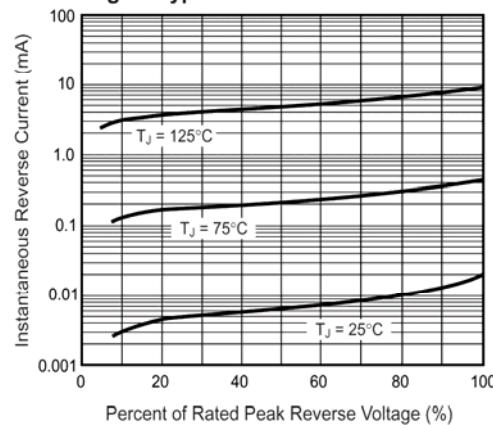


Fig. 5 - Typical Junction Capacitance

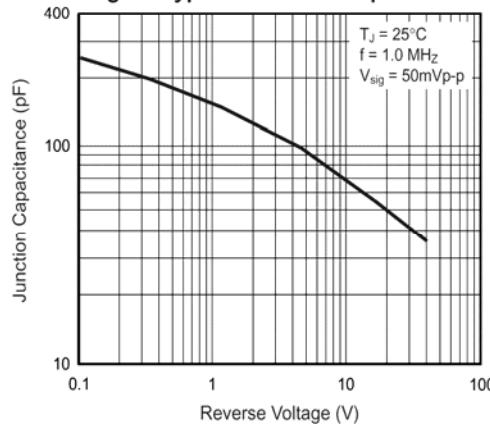
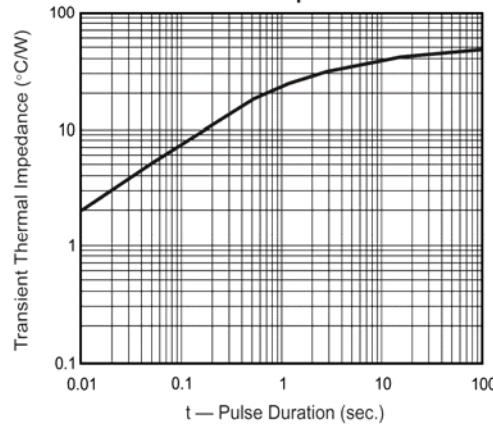


Fig. 6 - Typical Transient Thermal Impedance



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Ordering Information :

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

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