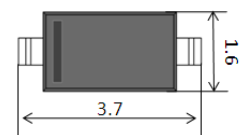


Features

- Low Forward Voltage Schottky
- Rectifier High Frequency Inverters
- RoHS Compliant / Green EMC
- SOD123 Thin SMD Package
- Matte Tin (Sn) Lead Finish
- Cathode Band / Device Marking

Device Marking Code	
B5817W	SJ
B5818W	SK
B5819W	SL

SOD-123 Unit:mm



Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	B5817W	B5818W	B5819W	Units
V_{RM}	Non-Repetitive Peak Reverse Voltage	20	30	40	V
V_{RRM}	Repetitive Peak Reverse Voltage	20	30	40	V
$V_{R(RMS)}$	RMS Reverse Voltage	14	21	28	V
I_O	Average Rectified Output Current	1			A
I_{FSM}	Non-Repetitive Peak Forward Surge Current @8.3mS	10			A
P_D	Power Dissipation	500			mW
T_J	Junction Temperature	125			$^{\circ}\text{C}$
T_{STG}	Storage Temperature	-55 to +125			$^{\circ}\text{C}$

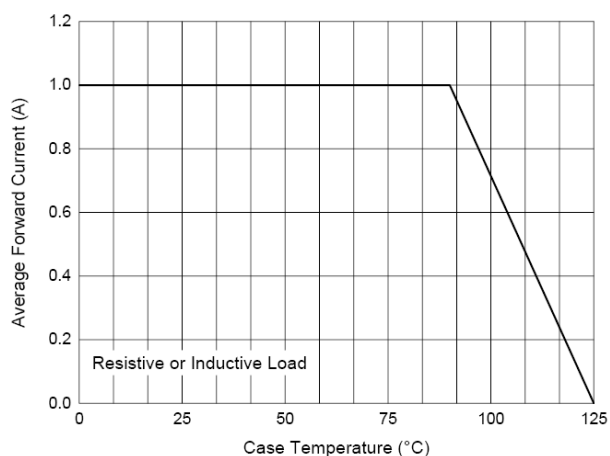
*1 8.3 ms single half sine-wave

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

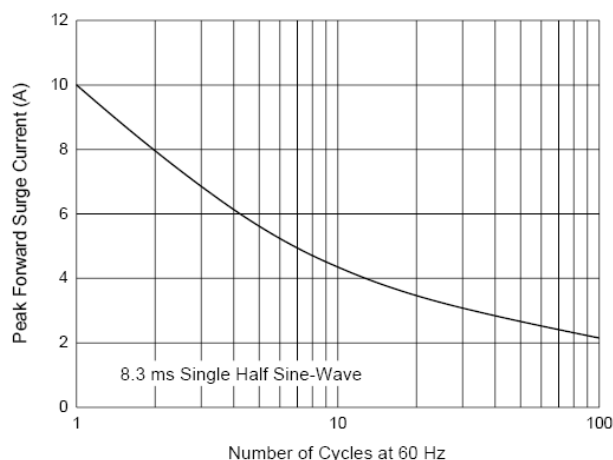
Symbol	Parameter	Test Conditions		Min	Typ	Max	Units
V_F	Forward Voltage	$I_F=1\text{A}$	B5817W			0.45	V
			B5818W			0.55	
			B5819W			0.60	
		$I_F=3\text{A}$	B5817W			0.75	V
			B5818W			0.875	
			B5819W			0.90	
I_R	Reverse Current	$V_R=20\text{V}$	B5817W			1	mA
		$V_R=30\text{V}$	B5818W			1	
		$V_R=40\text{V}$	B5819W			1	
C_J	Typical Junction Capacitance	$V_R=4\text{V}, f=1\text{MHz}$			120		pF



Typical Characteristics

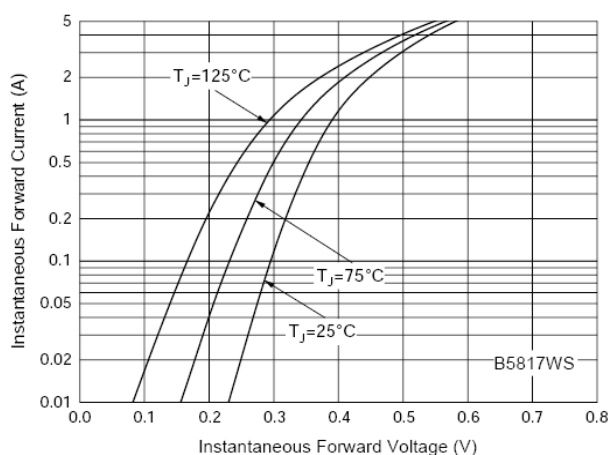


Forward Current Derating Curve

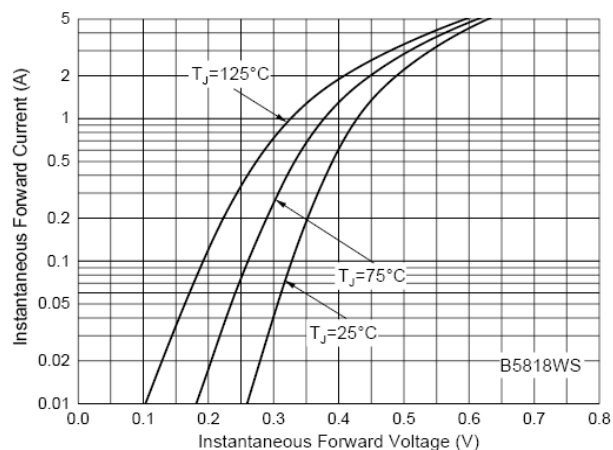


Maximum Non-Repetitive Peak

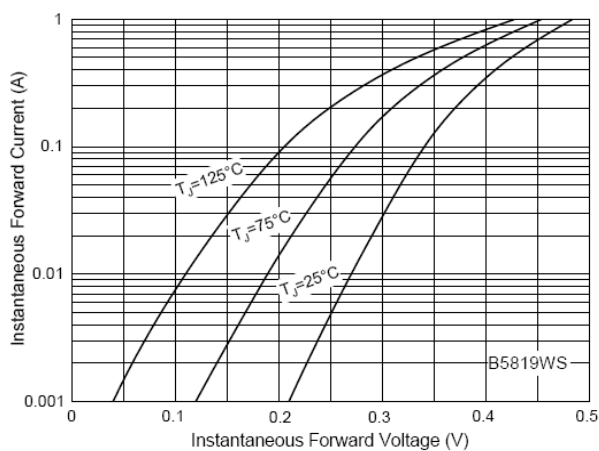
Forward Surge Current



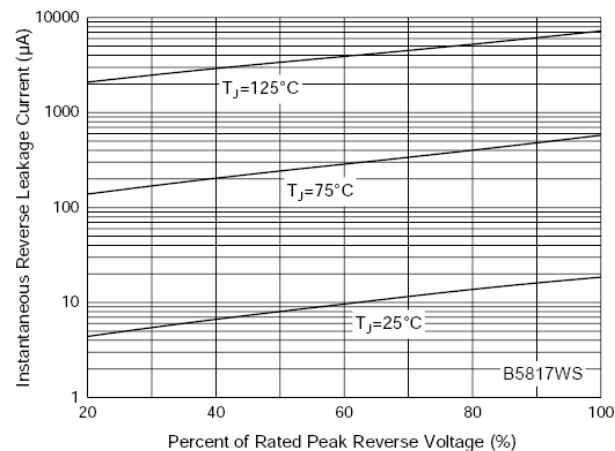
Typical Instantaneous Forward Characteristics



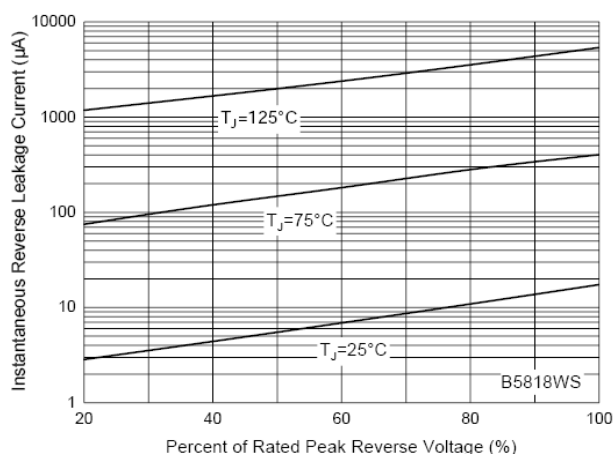
Typical Instantaneous Forward Characteristics



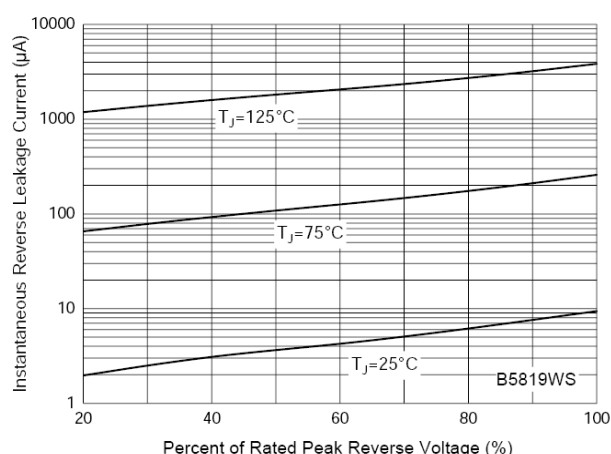
Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics



Typical Reverse Leakage Characteristics



Typical Reverse Leakage Characteristics

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
B5817W ~B5819W	SOD123	Tape & Reel 3000pcs /7" Reel	8 mm	4 mm	Conductive	

Package Dimensions

