

## 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 Junction Temperature Range: -65°C to +125°C
- Storage Temperature Range: -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

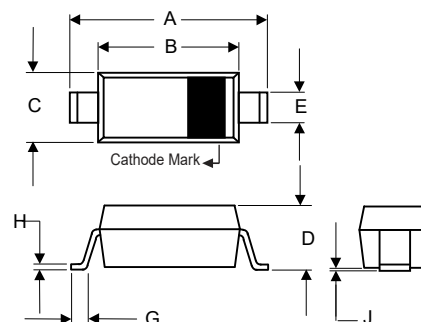
## Electrical Characteristics @ 25°C Unless Otherwise Specified

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 0.55V 0.60V	$I_{FM}=1.0A$ ; $T_J=25^\circ\text{C}$ (Note 1)
B5817W		0.75V 0.875V 0.90V	$I_{FM}=3A$ ; $T_J=25^\circ\text{C}$ (Note 1)
B5818W			
B5819W			
Reverse leakage Current	$I_R$	200 $\mu\text{A}$ (Max) 30 $\mu\text{A}$ (Typ.)	$V_R=20V$ , $T_A=25^\circ\text{C}$
B5817W			
B5818W		40 $\mu\text{A}$ (Max) 4 $\mu\text{A}$ (Typ.)	$V_R=30V$ , $T_A=25^\circ\text{C}$
B5819W		40 $\mu\text{A}$ (Max) 7 $\mu\text{A}$ (Typ.)	$V_R=40V$ , $T_A=25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	120pF	Measured at 1.0MHz, $V_R=4.0V$

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

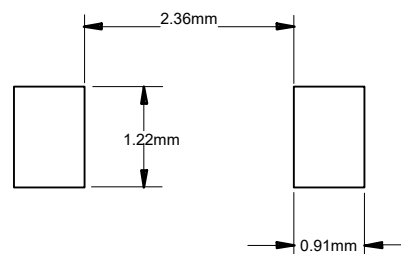
# 1 Amp Schottky Barrier Rectifier 20 - 40 Volts

## SOD-123



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.140	0.152	3.55	3.85	
B	0.100	0.112	2.55	2.85	
C	0.055	0.071	1.40	1.80	
D	----	0.053	----	1.35	
E	0.018	0.026	0.45	0.65	
G	0.006	----	0.15	----	
H	----	0.010	----	0.25	
J	----	0.006	----	0.15	

## Suggested Solder Pad Layout



## Curve Characteristics

Fig. 1 - Forward Characteristics

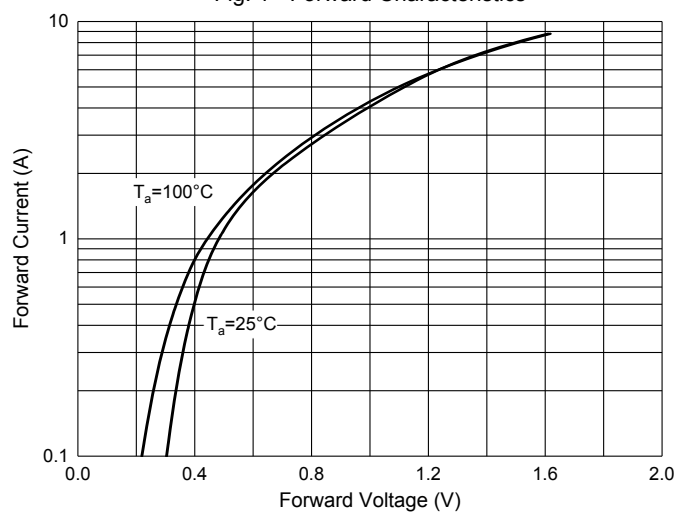


Fig. 2 - Reverse Characteristics

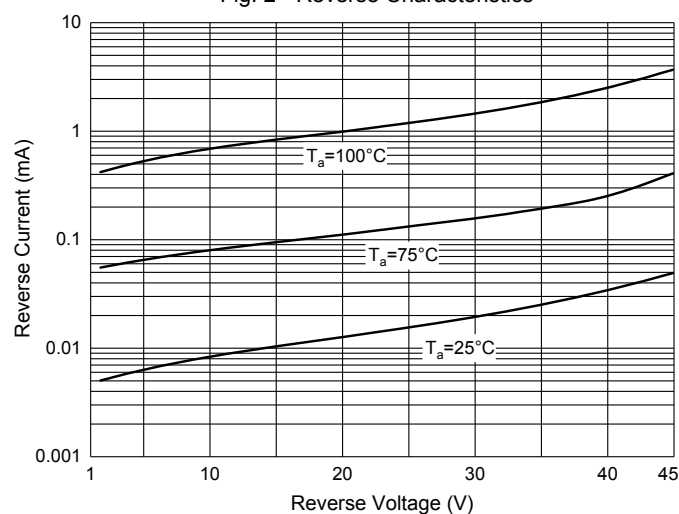
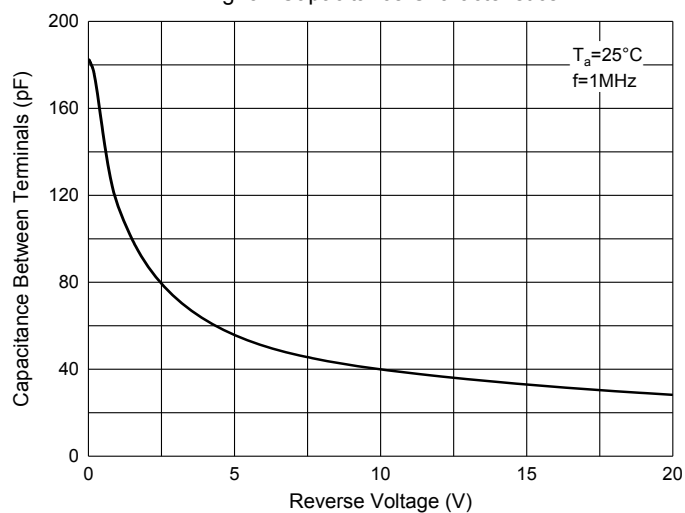


Fig. 3 - Capacitance Characteristics



## Ordering Information

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

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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