

FEATURES

- Extremely low V_F .
- Low stored charge, majority carrier conduction.
- Low power loss/high efficient

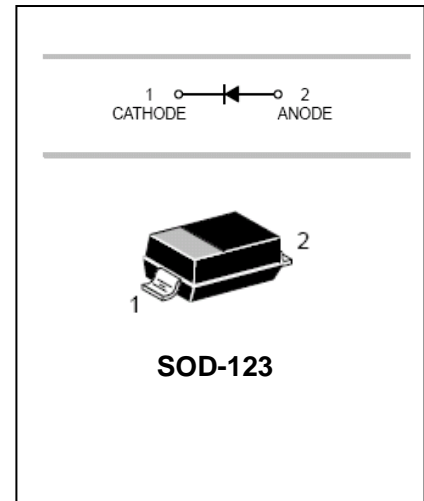


Lead-free

APPLICATIONS

- For Use In Low Voltage, High Frequency Inverters.
- Free Wheeling, And Polarity Protection Applications.

ORDERING INFORMATION



Type No.	Marking	Package Code
B5817W	SJ	SOD-123
B5818W	SK	SOD-123
B5819W	SL	SOD-123

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	symbol	B5817W	B5818W	B5819W	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	20	30	40	V
Peak repetitive Peak reverse voltage	V_{RRM}	20	30	40	V
Working Peak Reverse voltage	V_{RWM}				
DC Reverse Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified output Current	I_o	1			A
Peak forward surge current@=8.3ms	I_{FSM}	25			A
Repetitive Peak Forward Current	I_{FRM}	625			mA
Power Dissipation	P_d	250			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500			$^\circ\text{C}/\text{W}$
Storage temperature	T_{STG}	-65~+150			$^\circ\text{C}$

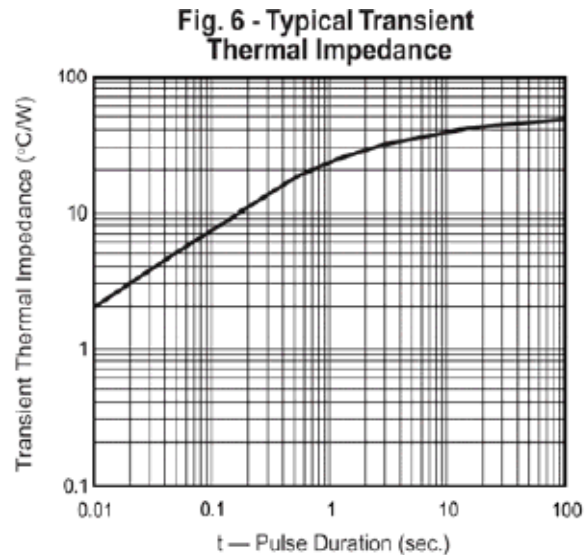
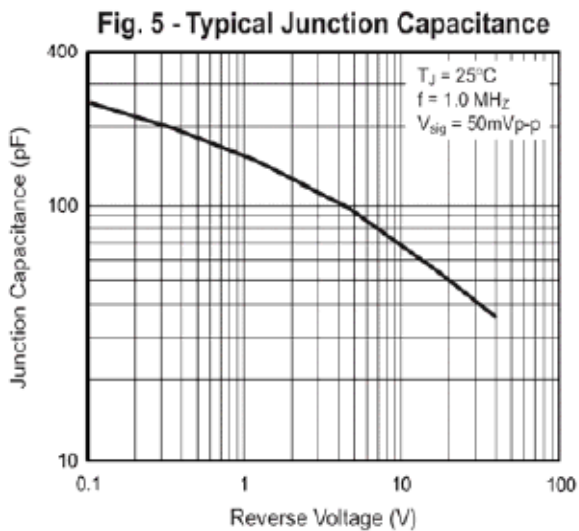
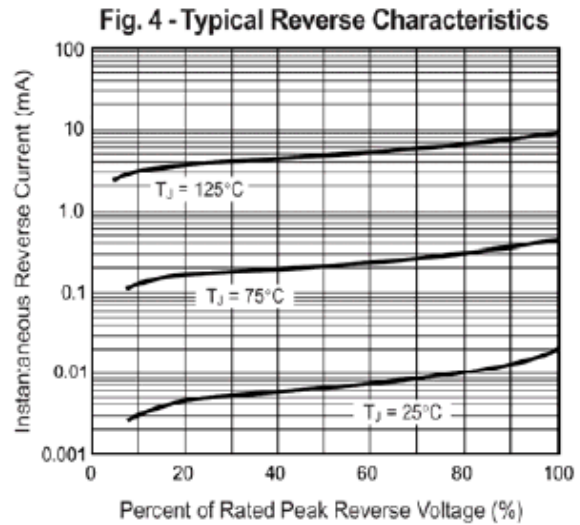
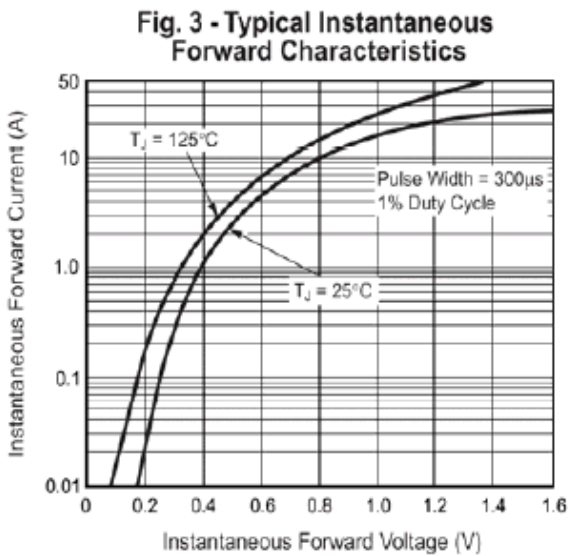
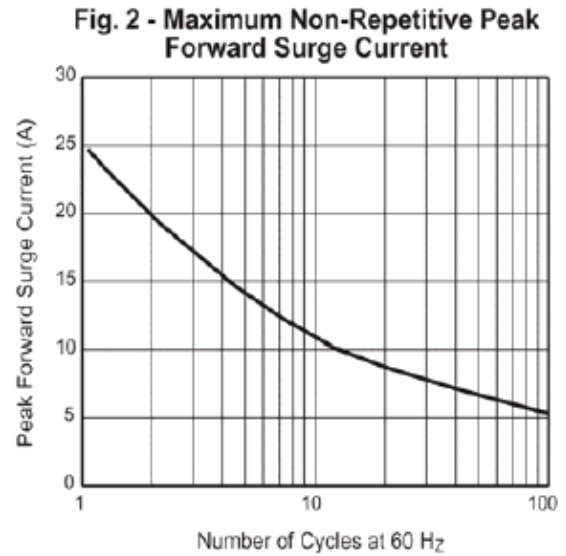
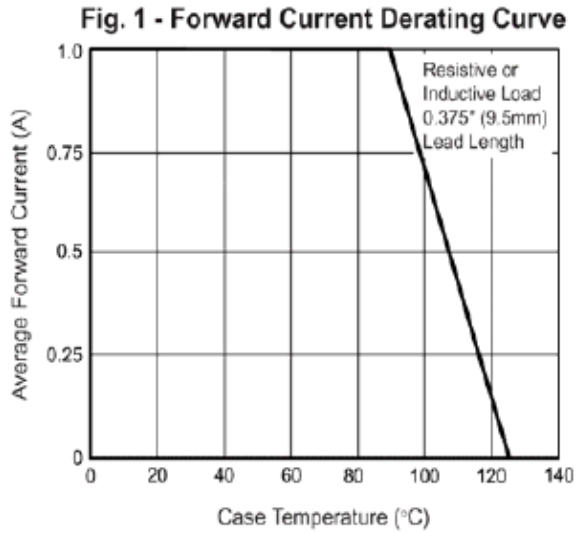
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test Condition	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$			V
		B5817W	20		
		B5818W	30		
Reverse voltage leakage current	I_R	$V_R=20V$	B5817W		mA
		$V_R=30V$	B5818W	1	
		$V_R=40V$	B5819W		
Forward voltage	V_F	B5817W	$I_F=1A$	0.45	V
			$I_F=3A$	0.75	
		B5818W	$I_F=1A$	0.55	
			$I_F=3A$	0.875	
		B5819W	$I_F=1A$	0.6	
			$I_F=3A$	0.9	
Diode capacitance	C_D	$V_R=4V, f=1MHz$		120	pF

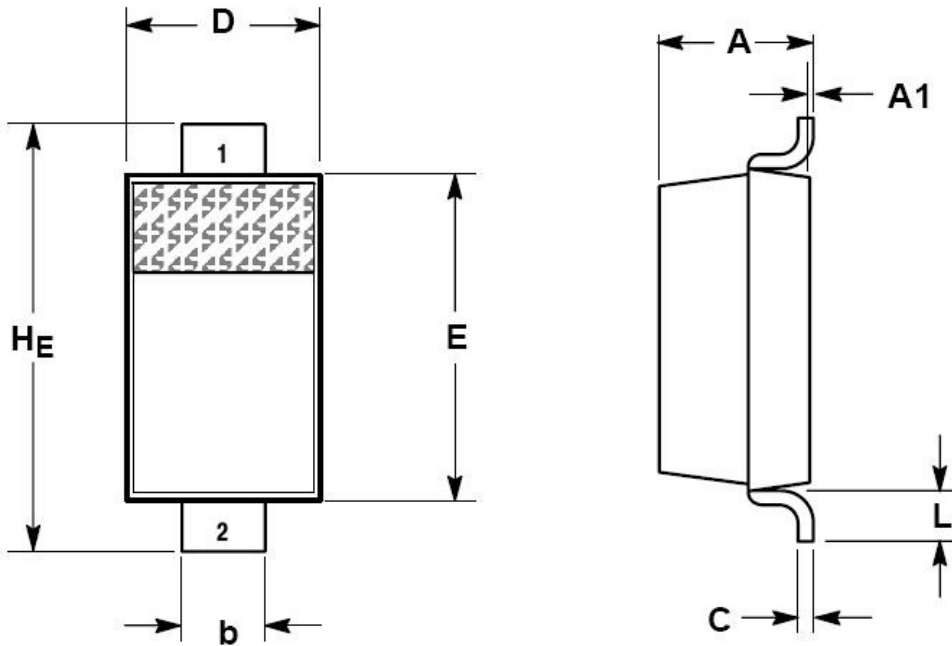
PACKAGE INFORMATION

Device	Package	Shipping
B5817W-B5819W	SOD-123	3000/Tape&Reel

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



SOD-123 PACKAGE OUTLINE & DIMENSIONS



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.94	1.17	1.35	0.037	0.046	0.053
A1	0.00	0.05	0.10	0.000	0.002	0.004
b	0.51	0.61	0.71	0.020	0.024	0.028
c	---	---	0.15	---	---	0.006
D	1.40	1.60	1.80	0.055	0.063	0.071
E	2.54	2.69	2.84	0.100	0.106	0.112
HE	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	---	---	0.010	---	---

* SOLDERING FOOTPRINT

