



Chip Schottky Barrier Rectifier

Forward Current : 1.0A
Reverse Voltage : 20V-40V

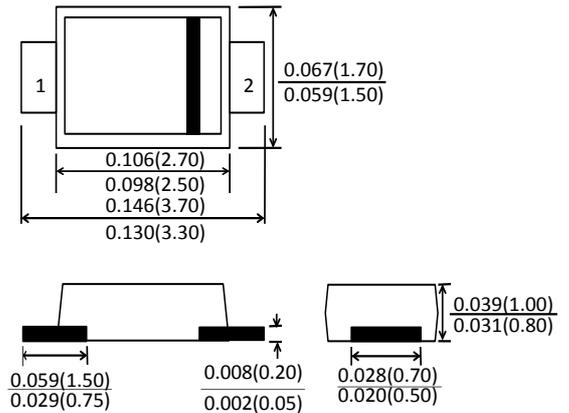
Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guardring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-123 Flat Lead
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any
- Weight : Approximated 0.01 gram

SOD-123 (Flat Lead)



Dimension in inch (mm)

Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I_o			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			9	A
Reverse current	$V_R = V_{RRM} T_J = 25^{\circ}\text{C}$	I_R			1.0	mA
	$V_R = V_{RRM} T_J = 100^{\circ}\text{C}$				50	
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C_J		120		pF
Storage temperature		T_{STG}	-65		+175	$^{\circ}\text{C}$

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature T_u ($^{\circ}\text{C}$)
B5817W	20	14	20	0.5	-55 to +125
B5818W	30	21	30	0.55	
B5819W	40	28	40	0.6	

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@ $I_F=1.0A$



RATING AND CHARACTERISTIC CURVES

