



BAT46W

Surface Mount Schottky Barrier Diode



Voltage Range
100 Volts
200m Watts Power Dissipation

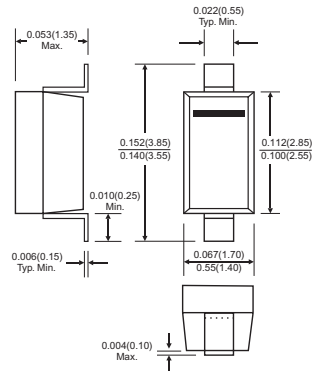
Features

- ✧ High breakdown voltage
- ✧ Low turn-on voltage
- ✧ Guard ring construction for transient protection

Mechanical Data

- ✧ Case: SOD-123, plastic
- ✧ Terminals: Solderable per MIL-STD-202, Method 208
- ✧ Polarity: Cathode band
- ✧ Marking: Date Code and Type Code or Date Code only
Type Code: L6
- ✧ Weight: 0.01 grams (approx.)

SOD-123



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	BAT46W	Units
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Average Rectified Forward Current	I_o	75	mA
Forward Continuous Current (Note 1)	I_F	150	mA
Repetitive Peak Forward Current (Note 1) @ $t_p < 1.0s$, Duty Cycle $< 50\%$	I_{FRM}	350	mA
Forward Surge Current (Note 1) @ $t_p=10ms$	I_{FSM}	750	mA
Power Dissipation (Note 1)	P_d	200	mW
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 125	°C

Electrical Characteristics

Type Number	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage $I_R=100\mu A$ pulses	$V_{(BR)}$	100	—	—	V
Reverse Leakage Current (Note 2) $V_R=1.5V$ $V_R=1.5V$ $T_j=60^\circ C$ $V_R=10V$ $V_R=10V$ $T_j=60^\circ C$ $V_R=50V$ $V_R=50V$ $T_j=60^\circ C$ $V_R=75V$ $V_R=75V$ $T_j=60^\circ C$	I_R	—	—	0.5 5.0 0.8 7.5 2.0 15 5.0 20	μA
Forward Voltage (Note 2) $I_F=0.1mA$ $I_F=10mA$ $I_F=250mA$	V_F	—	—	0.25 0.45 1.00	V
Junction Capacitance $V_R=0V, f=1.0MHz$ $V_R=1.0V, f=1.0MHz$	C_j	—	10 6.0	—	pF
Thermal resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	—	—	500	K/W

Notes: 1. Valid Provided that Leads are Kept at Ambient Temperature.

2. Pulse Test: Pulse width = 300 μs , Duty cycle $\leq 2\%$.