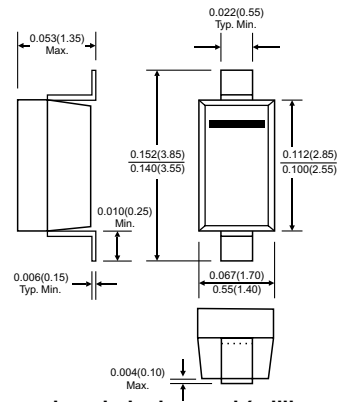
BAT46W

Surface Mount Schottky Barrier Diode

Voltage Range
100 Volts
200m Watts Power Dissipation

SOD-123



Dimensions in inches and (millimeters)

Features

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

Mechanical Data

- ✧ Case: SOD-123, plastic
- ✧ Terminals: Solderable per MIIL-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.)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	BAT46W	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	100	V
Average Rectified Forward Current	Io	75	mA
Forward Continuous Current (Note 1)	IF	150	mA
Repetitive Peak Forward Current (Note 1) @ tp < 1.0s, Duty Cycle < 50%	IFRM	350	mA
Forward Surge Current (Note 1) @ tp=10ms	IFSM	750	mA
Power Dissipation (Note 1)	Pd	200	mW
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 125	^{O}C

Electrical Characteristics

Type Number		Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage IR=100uA pulses		V(BR)	100	-	-	V
Reverse Leakage Current (Note 2)						
	VR=1.5V				0.5	
	VR=1.5V Tj=60 ^{O}C				5.0	
	VR=10V	IR	-	-	0.8	uA
	VR=10V Tj=60 ^{O}C				7.5	
	VR=50V			-	2.0	
	VR=50V Tj=60 ^{O}C				15	
	VR=75V				5.0	
	VR=75V Tj=60 ^{O}C				20	
Forward Voltage (Note 2)	IF=0.1mA	VF	-	-	0.25	V
	IF=10mA				0.45	
	IF=250mA				1.00	
Junction Capacitance	VR=0V, f=1.0MHz	Cj	-	10	-	pF
	VR=1.0V, f=1.0MHz			6.0		
Thermal resistance, Junction to Ambient Air (Note1)		RθJA	-	-	500	K/W

Notes: 1. Valid Provided that Leads are Kept at Ambient Temperature.
2. Pulse Test: Pulse width = 300uS, Duty cycle ≦2%..