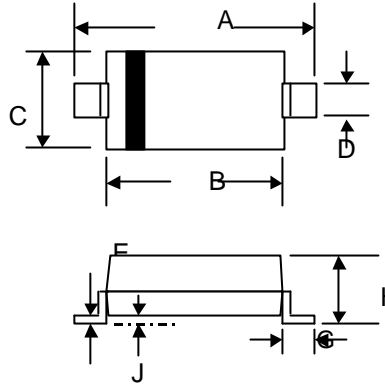


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**Features**

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-O



SOD-123		
Dim	Min	Max
A	3.6	3.9
B	2.5	2.8
C	1.4	1.8
D	0.5	0.7
E	—	0.2
G	0.4	—
H	0.95	1.35
J	—	0.12
All Dimensions in mm		

**Mechanical Data**

- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.01 grams (approx.)
- Marking: BAT42W L2  
BAT43W L3

**Maximum Ratings** @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	BAT42W / BAT43W	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	21	V
Average Rectified Output Current @T <sub>L</sub> = 70°C	I <sub>O</sub>	0.2	A
Repetitive Peak Forward Current (Note 1) @ t < 1.0s	I <sub>FRM</sub>	500	mA
Non-Repetitive Peak Forward Surge Current @ t < 10ms	I <sub>FSM</sub>	4.0	A
Power Dissipation	P <sub>d</sub>	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>JA</sub>	625	K/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +125	°C

**Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	V <sub>F</sub>	—	—	0.4	V	@ I <sub>F</sub> = 10mA
				1.0		@ I <sub>F</sub> = 200mA
				0.33		@ I <sub>F</sub> = 20mA
				1.0		@ I <sub>F</sub> = 200mA
Reverse Leakage Current	I <sub>R</sub>	—	—	0.5	μA	@ V <sub>R</sub> = 30V
Junction Capacitance	C <sub>J</sub>	—	—	10	pF	V <sub>R</sub> = 1.0V, f = 1.0MHz

Note: 1. Valid provided that terminals are kept at ambient temperature.

**SENSITRON**  
**SEMICONDUCTOR**

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**ORDERING INFORMATION**

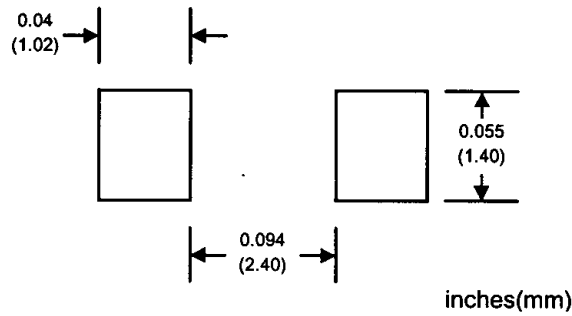
Product No.♦	Package Type	Shipping Quantity
<b>BAT42W-T1</b>	SOD-123	3000/Tape & Reel
BAT42W-T3	SOD-123	10000/Tape & Reel
<b>BAT43W-T1</b>	SOD-123	3000/Tape & Reel
BAT43W-T3	SOD-123	10000/Tape & Reel

Products listed in **bold** are WTE Preferred devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

**RECOMMENDED FOOTPRINT**



**TECHNICAL DATA**

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