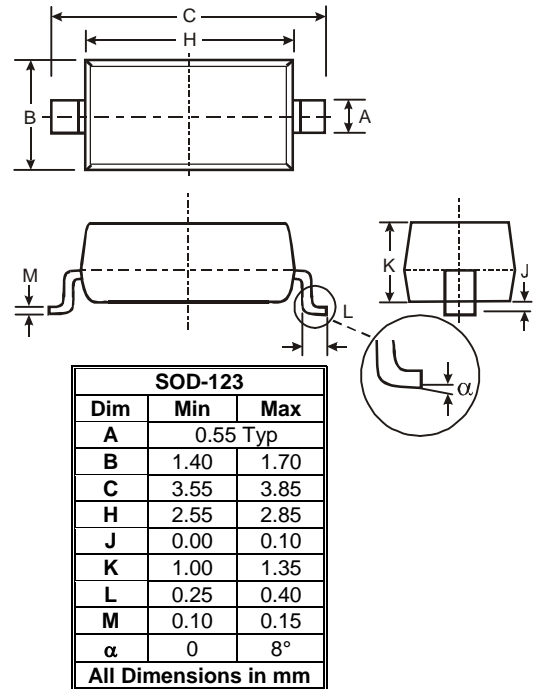


Features

- 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

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 and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAT42W / BAT43W				Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	30				V
Forward Continuous Current (Note 1)	I _F	200				mA
Repetitive Peak Forward Current (Note 1) @ t < 1.0s	I _{FRM}	500				mA
Non-Repetitive Peak Forward Surge Current @ t < 10ms	I _{FSM}	4.0				A
Power Dissipation	P _d	200				mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	625				K/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +125				°C

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	V _{(BR)R}	30	—	—	V	@ I _{RS} = 100μA
Forward Voltage	V _F	—	—	0.4	V	@ I _F = 10mA
				1.0		@ I _F = 200mA
				0.33		@ I _F = 2mA
				1.0		@ I _F = 200mA
Reverse Leakage Current	I _R	—	—	0.5	μA	@ V _R = 25V
Junction Capacitance	C _j	—	—	10	pF	V _R = 1.0V, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	—	5	nS	I _F = 10mA through I _R = 10mA to I _R = 1mA, R _L = 100Ω

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

ORDERING INFORMATION

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

