

BAW56

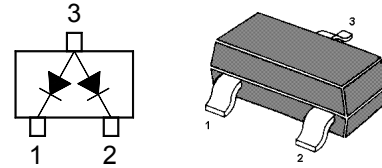
Silicon Epitaxial Planar Switching Diode

Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

Applications

- Ultra high speed switching application



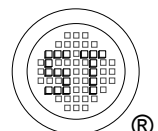
Marking Code: A1
TO-236 Plastic Package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Reverse Voltage	V_R	75	V
Forward Current (DC)	I_F	215	mA
Repetitive Peak Forward Current	I_{FRM}	450	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5	A
at $t = 1$ s		1	
at $t = 1$ ms		4	
at $t = 1$ μ s			
Power Dissipation	P_{tot}	350	mW
Operating Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage			
at $I_F = 1$ mA	V_F	715	mV
at $I_F = 10$ mA	V_F	855	mV
at $I_F = 50$ mA	V_F	1	V
at $I_F = 150$ mA	V_F	1.25	V
Reverse Current			
at $V_R = 25$ V	I_R	30	nA
at $V_R = 75$ V	I_R	1	μ A
at $V_R = 25$ V, $T_J = 150^\circ\text{C}$	I_R	30	μ A
at $V_R = 75$ V, $T_J = 150^\circ\text{C}$	I_R	50	μ A
Diode Capacitance	C_d	2	pF
Reverse Recovery Time	t_{rr}	4	ns
at $I_F = 10$ mA, $V_R = 6$ V, $I_{rr} = 1$ mA, $R_L = 100 \Omega$			



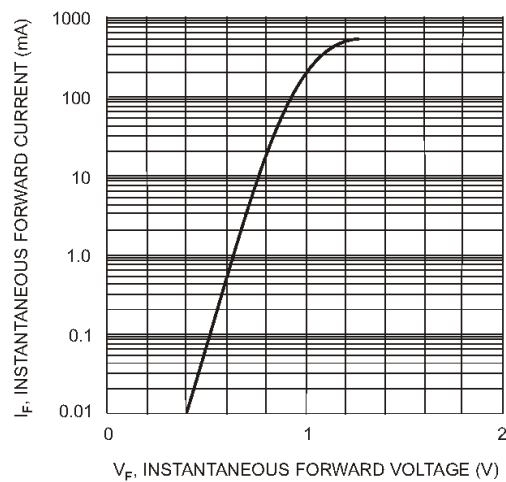


Fig. 1 Forward Characteristics

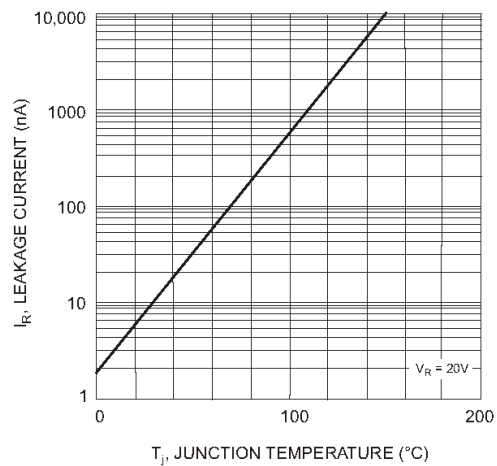


Fig. 2 Leakage Current vs Junction Temperature

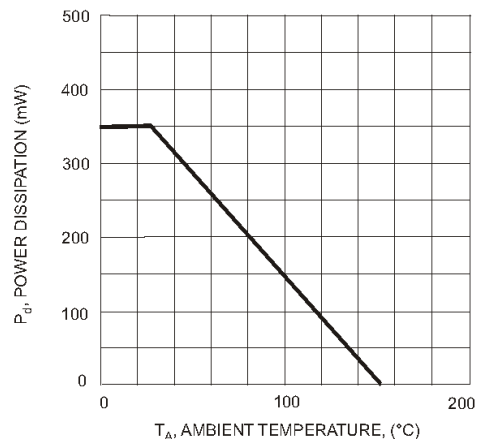
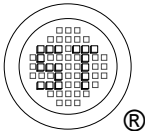


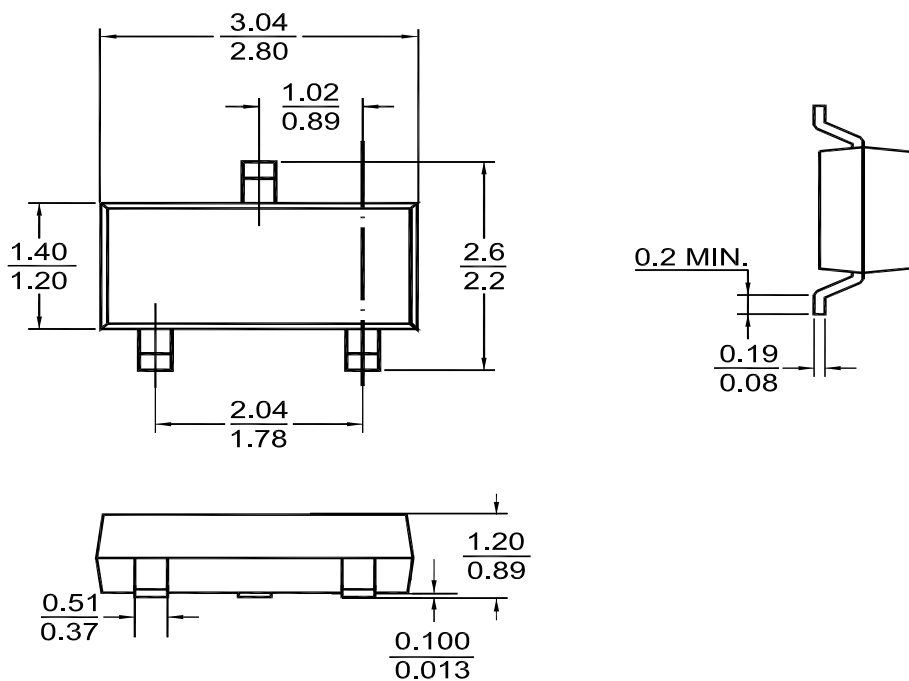
Fig. 3 Power Derating Curve, total package



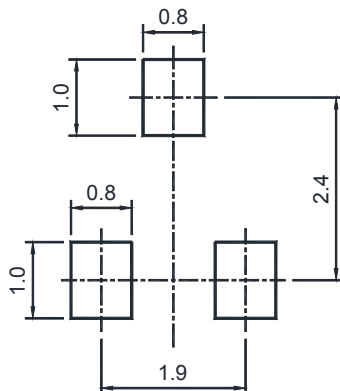
PACKAGE OUTLINE

Plastic surface mounted package (Dimensions in mm)

TO-236



Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
TO-236	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

