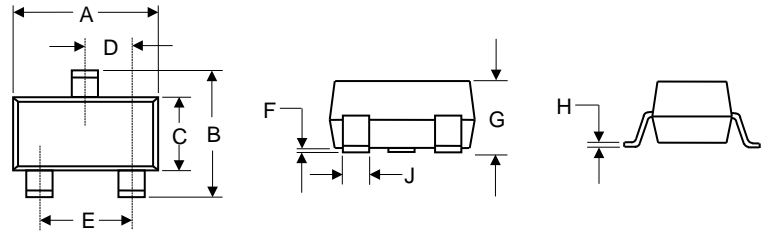
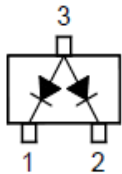


### Features

- \* Small package
- \* Low forward voltage
- \* Fast reverse recovery time
- \* Small total capacitance
- \* Ultra high speed switching application
- \* Marking Code: A1



RoHS  
COMPLIANT



SOT-23				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.110	0.120	2.80	3.04
B	0.087	0.102	2.20	2.60
C	0.047	0.055	1.20	1.40
D	0.035	0.04	0.89	1.02
E	0.070	0.080	1.78	2.04
F	---	0.004	---	0.10
G	0.035	0.047	0.89	1.20
H	0.003	0.008	0.08	0.19
J	0.015	0.02	0.37	0.51

### Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	85	V
Continuous Reverse Voltage	V <sub>R</sub>	75	V
Forward Current (DC) Single Diode Loaded Double Diode Loaded	I <sub>F</sub>	215 125	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	450	mA
Non-repetitive Peak Forward Surge Current at t = 1 s at t = 1 ms at t = 1 μs	I <sub>FSM</sub>	0.5 1 4	A
Power Dissipation	P <sub>tot</sub>	350	mW
Operating Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	- 65 to + 150	°C

### Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Max.	Unit
Forward Voltage at I <sub>F</sub> = 1 mA at I <sub>F</sub> = 10 mA at I <sub>F</sub> = 50 mA at I <sub>F</sub> = 150 mA	V <sub>F</sub>	715	mV
		855	mV
		1	V
		1.25	V
Reverse Current at V <sub>R</sub> = 25 V at V <sub>R</sub> = 75 V at V <sub>R</sub> = 25 V, T <sub>J</sub> = 150°C at V <sub>R</sub> = 75 V, T <sub>J</sub> = 150°C	I <sub>R</sub>	30	nA
		1	μA
		30	μA
		50	μA
Diode Capacitance at V <sub>R</sub> = 0, f = 1 MHz	C <sub>d</sub>	2	pF
Reverse Recovery Time at I <sub>F</sub> = 10 mA, V <sub>R</sub> = 6 V, I <sub>rr</sub> = 1 mA, R <sub>L</sub> = 100 Ω	t <sub>rr</sub>	4	ns

### Ratings and Characteristic Curves

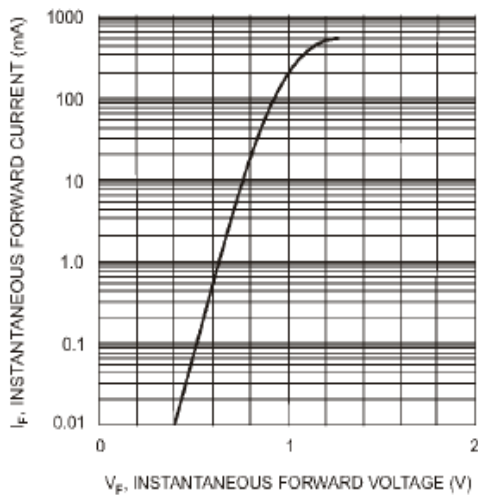


Fig. 1 Forward Characteristics

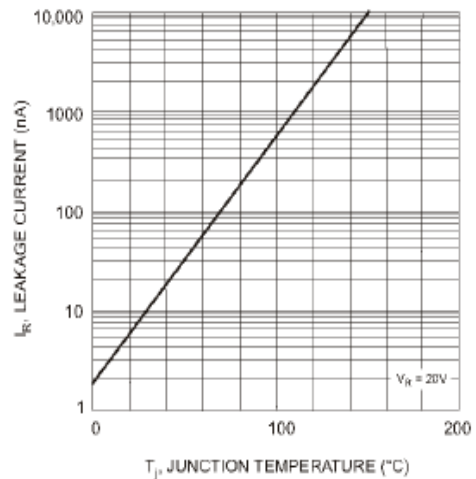


Fig. 2 Leakage Current vs Junction Temperature

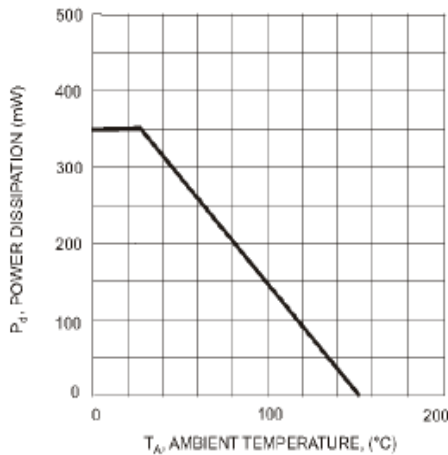


Fig. 3 Power Derating Curve, total package



# BAW56

## *Silicon Epitaxial Planar Switching Diode*

---

### Ordering Information

---

Part No.	Package	Packing Code	Packing
BAW56	SOT-23	R30	3000pcs/Reel

### Disclaimer

Specifications of the products displayed herein are subject to change without notice. JGD or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in JGD's terms and conditions of sale for such products, JGD assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of JGD products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify JGD for any damages resulting from such improper use or sale.