



# FUKUCOM COMPANY LTD.

## 福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

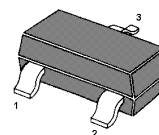
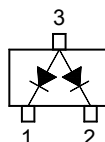
TEL: 852-2790 0314 FAX: 852-2790 0206

### 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

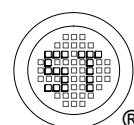
Marking Code: A1  
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	85	V	
Continuous Reverse Voltage	$V_R$	75	V	
Forward Current (DC)	$I_F$	215	mA	
Single Diode Loaded		125		
Repetitive Peak Forward Current	$I_{FRM}$	450	mA	
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	0.5	A	
		at $t = 1\text{ ms}$		1
		at $t = 1\text{ }\mu\text{s}$		4
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 $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit	
Forward Voltage	$V_F$	715	mV	
		at $I_F = 1\text{ mA}$		
		at $I_F = 10\text{ mA}$	855	mV
		at $I_F = 50\text{ mA}$	1	V
at $I_F = 150\text{ mA}$	$V_F$	1.25	V	
Reverse Current	$I_R$	30	nA	
		at $V_R = 25\text{ V}$		
		at $V_R = 75\text{ V}$	1	$\mu\text{A}$
		at $V_R = 25\text{ V}, T_j = 150\text{ }^\circ\text{C}$	30	$\mu\text{A}$
at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$	$I_R$	50	$\mu\text{A}$	
Diode Capacitance	$C_d$	2	pF	
at $V_R = 0, f = 1\text{ MHz}$				
Reverse Recovery Time	$t_{rr}$	4	ns	
at $I_F = I_R = 10\text{ mA}, R_L = 100\text{ }\Omega$				



Dated : 15/06/2009



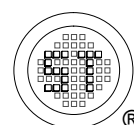
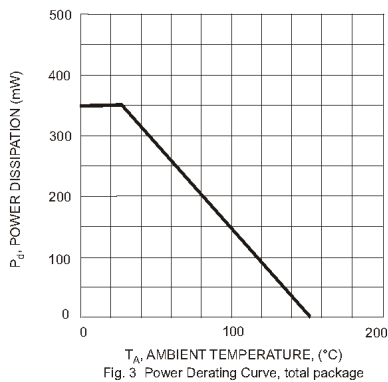
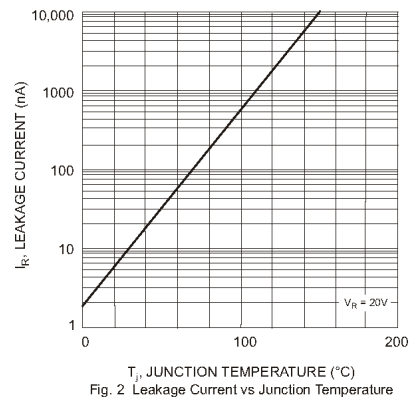
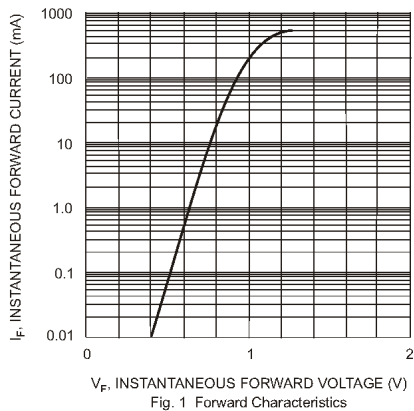
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