

BAW56W

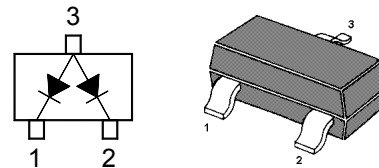
Silicon Epitaxial Planar Switching Diode

Features

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

Applications

- Ultra high speed switching application



Marking Code: YX
SOT-323 Plastic Package

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

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	
Double Diode Loaded			
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}	200	mW
Operating Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage	V_F	715	mV
at $I_F = 1$ mA		855	mV
at $I_F = 10$ mA		1	V
at $I_F = 50$ mA		1.25	V
Reverse Current	I_R	30	nA
at $V_R = 25$ V		1	μ A
at $V_R = 75$ V		30	μ A
at $V_R = 25$ V, $T_J = 150^\circ\text{C}$		50	μ A
Diode Capacitance	C_d	2	pF
at $V_R = 0$, $f = 1$ MHz			
Reverse Recovery Time	t_{rr}	4	ns
at $I_F = 10$ mA, $V_R = 6$ V, $I_{rr} = 1$ mA, $R_L = 100 \Omega$			

