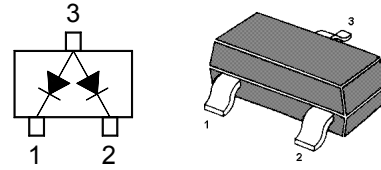


# BAW56W

## Silicon Epitaxial Planar Switching Diode

### Features

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



Marking Code: YX  
SOT-323 Plastic Package

### Applications

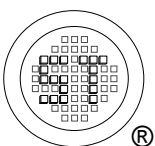
- Ultra high speed switching application

### 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)	Single Diode Loaded	215	mA
	Double Diode Loaded	125	
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non-repetitive Peak Forward Surge Current	at $t = 1\text{ s}$	0.5	A
	at $t = 1\text{ ms}$	1	
	at $t = 1\text{ }\mu\text{s}$	4	
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 $T_a = 25^\circ\text{C}$

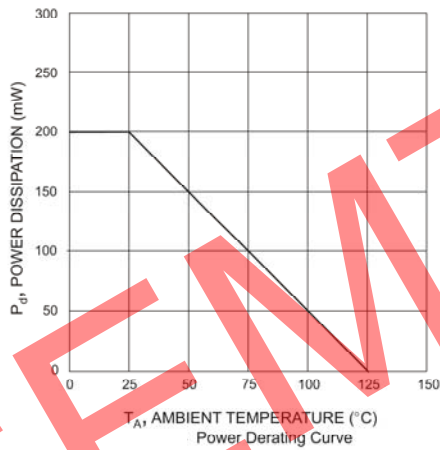
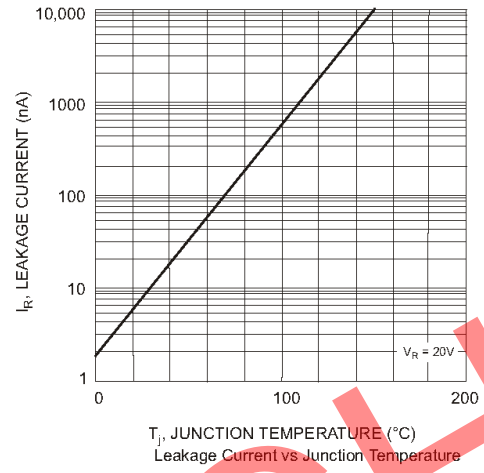
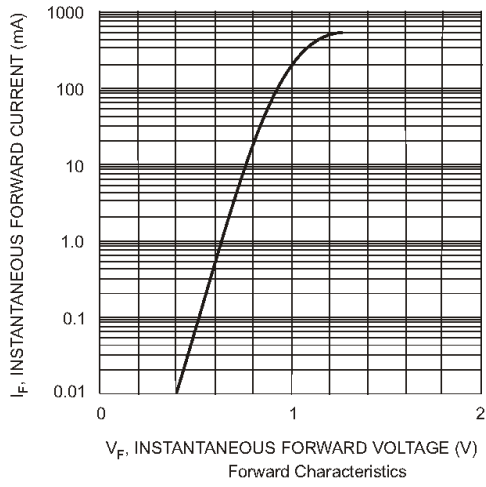
Parameter	Symbol	Max.	Unit
Forward Voltage	at $I_F = 1\text{ mA}$	715	mV
	at $I_F = 10\text{ mA}$	855	mV
	at $I_F = 50\text{ mA}$	1	V
	at $I_F = 150\text{ mA}$	1.25	V
Reverse Current	at $V_R = 25\text{ V}$	30	nA
	at $V_R = 75\text{ V}$	1	$\mu\text{A}$
	at $V_R = 25\text{ V}, T_J = 150^\circ\text{C}$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



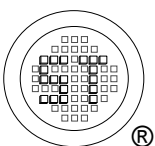
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