



BAW75/BAW76 T-23-05
High Speed Computer Diodes

- t_{rr} ... 4 ns (max)
- C ... 4 pf (max)

PACKAGES

BAW75 DO-35
BAW76 DO-35

ABSOLUTE MAXIMUM RATINGS (Note 1)

Temperatures

Storage Temperature Range -65°C to +200°C
Maximum Junction Operating Temperature +175°C
Lead Temperature +260°C

Power Dissipation (Note 2)

Maximum Total Power Dissipation at 25°C Ambient 500 mW
Linear Power Derating Factor (from 25°C) 3.33 mW/°C

Maximum Voltage and Currents

WIV	Working Inverse Voltage	BAW 75	25V
		BAW 76	50V
I_O	Average Rectified Current		100 mA
I_F	Continuous Forward Current		300 mA
i_f	Peak Repetitive Forward Current		400 mA
I_f (surge)	Peak Forward Surge Current		1.0 A
	Pulse Width = 1 s		4.0 A
	Pulse Width = 1 μ s		

ELECTRICAL CHARACTERISTICS (25°C Ambient Temperature unless otherwise noted)

SYMBOL	CHARACTERISTIC	BAW 75		BAW 76		UNITS	TEST CONDITIONS
		MIN	MAX	MIN	MAX		
V_F	Forward Voltage		1.0		1.0	V V	$I_F = 30$ mA $I_F = 100$ mA
I_R	Reverse Current		100 100		100 100	nA nA μ A μ A	$V_R = 25$ V $V_R = 50$ V $V_R = 25$ V, $T_A = 150^\circ$ C $V_R = 50$ V, $T_A = 150^\circ$ C
B_V	Breakdown Voltage	35		75		V	$I_R = 5.0$ μ A
C	Capacitance		4.0		2.0	pf	$V_R = 0$, $f = 1$ MHz
t_{rr}	Reverse Recovery Time		4.0 2.0		4.0 2.0	ns ns	$I_f = I_r = 10$ mA Recovery to 1 mA $I_f = 10$ mA, $V_R = 6$ V, $R_L = 100 \Omega$

NOTES:

1. These ratings are limiting values above which the serviceability of the diode may be impaired.
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty-cycle operation.
3. For product family characteristic curves, refer to Chapter 4, D4.