

## BAW75 ~ BAW76

### FEATURES :

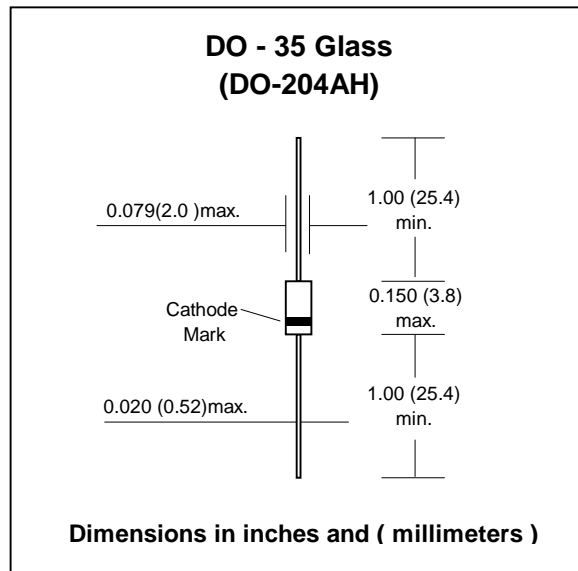
- High switching speed: max. 4 ns
- Reverse voltage: max. 25V , 50V
- Peak reverse voltage: max. 35V, 75 V
- Pb / RoHS Free

### MECHANICAL DATA :

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13g

## HIGH SPEED SWITCHING DIODES



### Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter		Symbol	Value	Unit
Maximum Peak Reverse Voltage	BAW75	$V_{RM}$	25	V
	BAW76		50	
Maximum Reverse Voltage	BAW75	$V_{RM}$	35	V
	BAW76		75	
Maximum Average Forward Current Half Wave Rectification with Resistive Load , $f \geq 50\text{Hz}$		$I_{F(AV)}$	150 <sup>(1)</sup>	mA
Maximum Power Dissipation		$P_D$	500 <sup>(1)</sup>	mW
Maximum Surge Forward Current at $t < 1\mu\text{s}$ , $T_J = 25^\circ\text{C}$		$I_{FSM}$	2	A
Maximum Junction Temperature		$T_J$	200	$^\circ\text{C}$
Storage Temperature Range		$T_S$	-65 to + 200	$^\circ\text{C}$

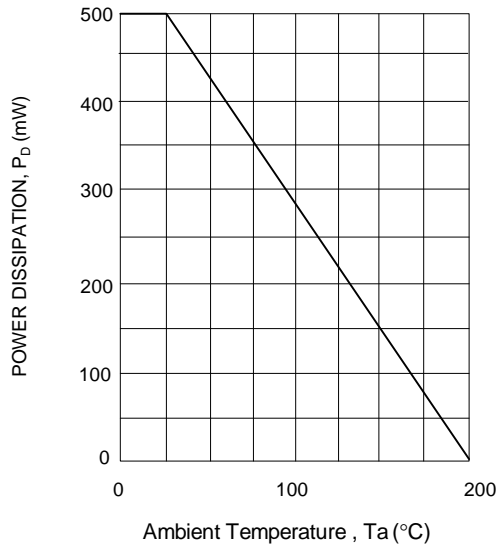
**Note :** (1) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

### Electrical Characteristics ( $T_J = 25^\circ\text{C}$ unless otherwise noted)

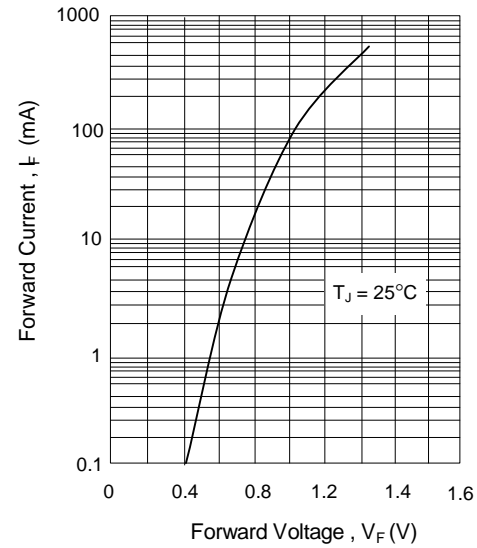
Parameter		Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Current	BAW75	$I_R$	$V_R = 25\text{V}$	-	-	100	nA
	BAW76		$V_R = 50\text{V}$	-	-	100	
Forward Voltage	BAW75	$V_F$	$I_F = 30\text{mA}$	-	-	1.0	V
	BAW76		$I_F = 100\text{mA}$	-	-	1.0	
Reverse Breakdown Voltage	BAW75	$V_{(BR)R}$	Test with $5\mu\text{A}$ pulses	35	-	-	V
	BAW76			75	-	-	
Diode Capacitance	BAW75	Cd	$f = 1\text{MHz}$ ; $V_R = 0$	-	-	4.0	pF
	BAW76			-	-	2.0	
Reverse Recovery Time		$T_{rr}$	$I_F = 10\text{mA}$ , $I_R = 10\text{mA}$ $I_{rr} = 1\text{mA}$	-	-	4	ns

## RATING AND CHARACTERISTIC CURVES ( BAW75 ~ BAW76 )

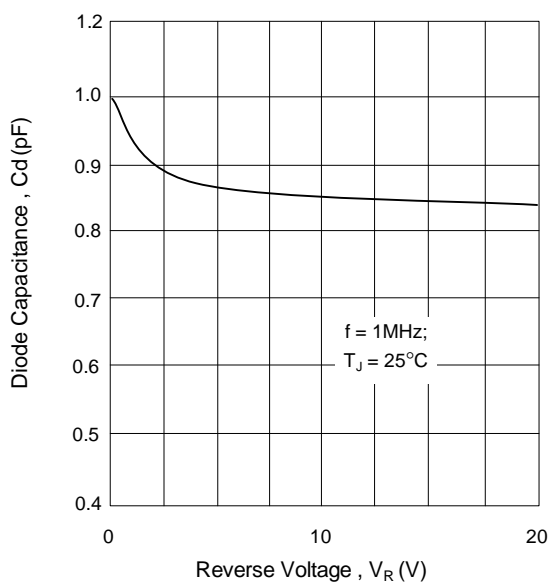
**FIG. 1 ADMISSIBLE POWER DISSIPATION  
VERSUS AMBIENT TEMPERATURE**



**FIG. 2 TYPICAL FORWARD VOLTAGE**



**FIG. 3 TYPICAL DIODE CAPACITANCE AS  
A FUNCTION OF REVERSE VOLTAGE**



**FIG. 4 TYPICAL REVERSE CURRENT  
VERSUS JUNCTION TEMPERATURE**

