



BAW75 and BAW76

Small-Signal Diode
Fast Switching Diodes

Features

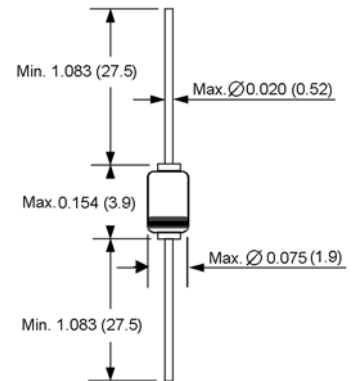
- ◆ Silicon Epitaxial Planar Diode
- ◆ Fast switching diodes.



DO-204AH (DO-35 Glass)

Mechanical Data

- ◆ Case: DO-35 Glass Case
- ◆ Weight: approx. 0.13g



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics

($T_A=25^\circ\text{C}$ unless otherwise noted.)

Parameter		Symbol	Limit	Unit
Reverse voltage	BAW75 BAW76	V_R	25 50	Volts
Peak reverse voltage	BAW75 BAW76	V_{RM}	35 75	Volts
Rectified current (Average) half wave rectification with resist. load at $T_{amb}=25^\circ\text{C}$ and $f_{\geq}50\text{Hz}$		I_O	150 ⁽¹⁾	mA
Surge forward current at $t < 1\mu\text{s}$ and $T_J=25^\circ\text{C}$		I_{FSM}	2.0	Amps
Power dissipation at $T_{amb}=25^\circ\text{C}$		P_{tot}	500 ⁽¹⁾	mW
Thermal resistance junction to ambient air		$R_{\theta JA}$	0.35 ⁽¹⁾	$^\circ\text{C/W}$
Junction temperature		T_J	175	$^\circ\text{C}$
Storage temperature range		T_S	-65 to +175	$^\circ\text{C}$

Notes: 1. Valid provided that leads are kept at ambient temperature at a distance of 8mm from case

Electrical Characteristics

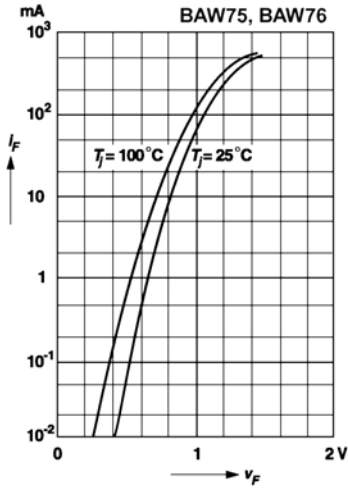
($T_J=25^\circ\text{C}$ unless otherwise noted.)

Parameter		Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	BAW75 BAW76	V_F	at $I_F=30\text{mA}$ at $I_F=100\text{mA}$	-	-	1.0 1.0	Volt
Leakage current	BAW75	I_R	$V_R=25\text{V}$	-	-	100	nA
	BAW75		$V_R=25\text{V}, T_J=150^\circ\text{C}$	-	-	100	μA
	BAW76		$V_R=50\text{V}$	-	-	100	nA
	BAW76		$V_R=50\text{V}, T_J=150^\circ\text{C}$	-	-	100	μA
Reverse breakdown voltage	BAW75 BAW76	$V_{(BR)R}$	tested with 5 μA pulses	35 75	- -	- -	Volts
Capacitance	BAW75 BAW76	C_{tot}	$V_F=V_R=0\text{V}$	- -	- -	4.0 2.0	pF
Reverse recovery time		t_{rr}	$I_F=10\text{mA}, I_R=10\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}, I_R=1\text{mA}$ $V_R=6\text{V}, R_L=100\Omega$	- - -	- - -	4 - 2	ns

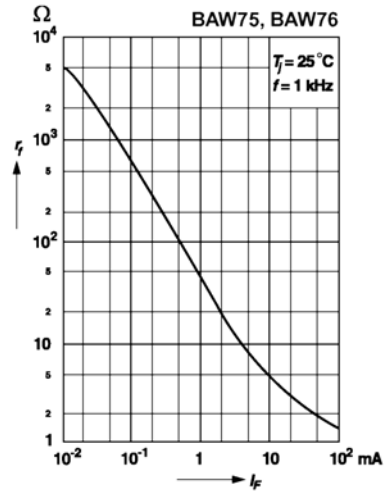
RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted.)

Forward characteristics

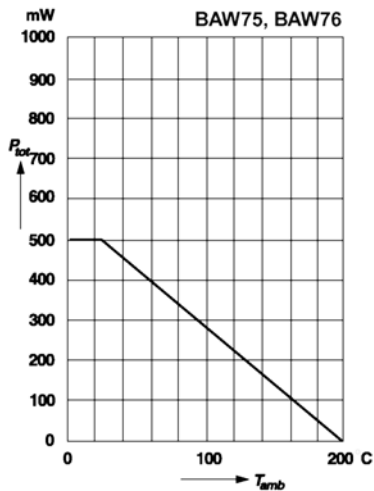


Dynamic forward resistance versus forward current

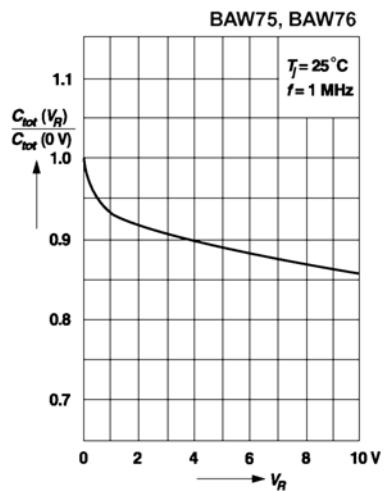


Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature



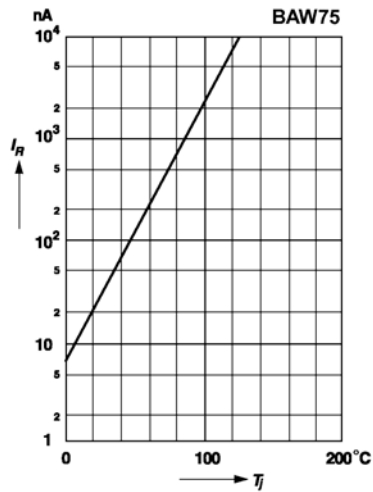
Relative capacitance versus reverse voltage



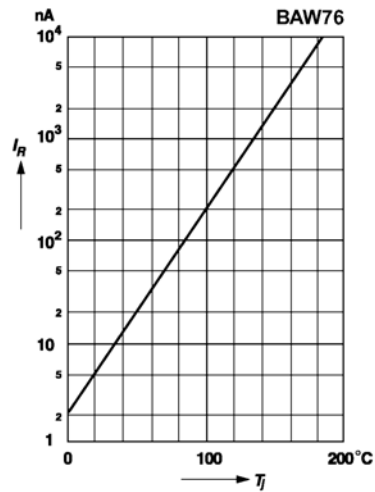
RATINGS AND CHARACTERISTIC CURVES

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Leakage current versus junction temperature



Leakage current versus junction temperature



Admissible repetitive peak forward current versus pulse duration

For conditions, see footnote in table "Absolute Maximum Ratings"

