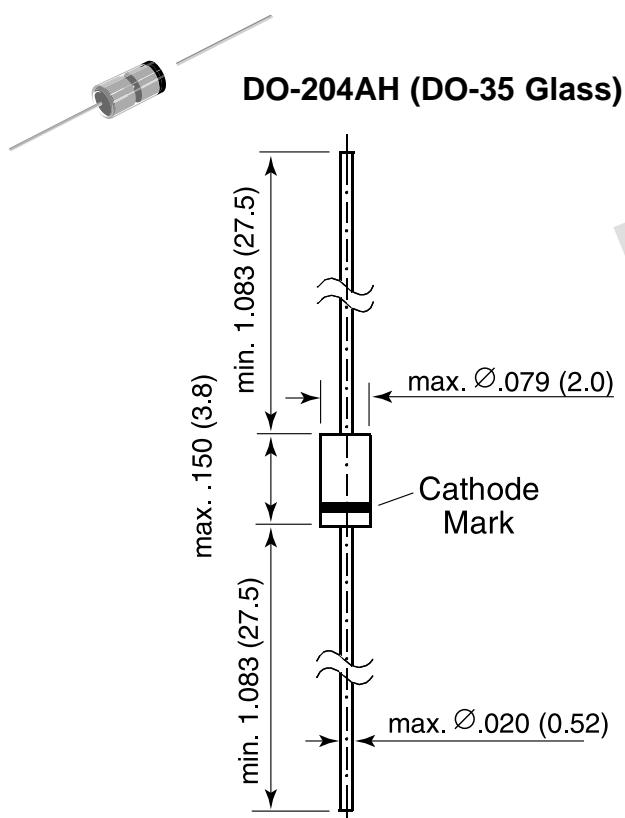


## Small-Signal Diodes



Dimensions in inches and (millimeters)

### Features

- Silicon Epitaxial Planar Diodes
- Fast switching diodes.

### Mechanical Data

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13g

**Packaging Codes/Options:**

D7/10K per 13" reel (52mm tape), 20K/box

D8/10K per Ammo tape (52mm tape), 20K/box

### Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Parameter		Symbol	Value	Unit
Reverse Voltage	BAW75 BAW76	V <sub>R</sub>	25 50	V
Peak Reverse Voltage	BAW75 BAW76	V <sub>RM</sub>	35 75	V
Rectified Current (Average) Half Wave Rectification with Resistive Load at TA = 25°C and f ≥ 50 Hz		I <sub>o</sub>	150 <sup>(1)</sup>	mA
Surge Forward Current at t < 1µs, T <sub>j</sub> = 25°C		I <sub>FSM</sub>	2	A
Power Dissipation at TA = 25°C		P <sub>tot</sub>	500 <sup>(1)</sup>	mW
Thermal Resistance Junction to Ambient Air		R <sub>θJA</sub>	0.35 <sup>(1)</sup>	°C/W
Junction Temperature		T <sub>j</sub>	200	°C
Storage Temperature Range		T <sub>s</sub>	-65 to +200	°C

**Note:**

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

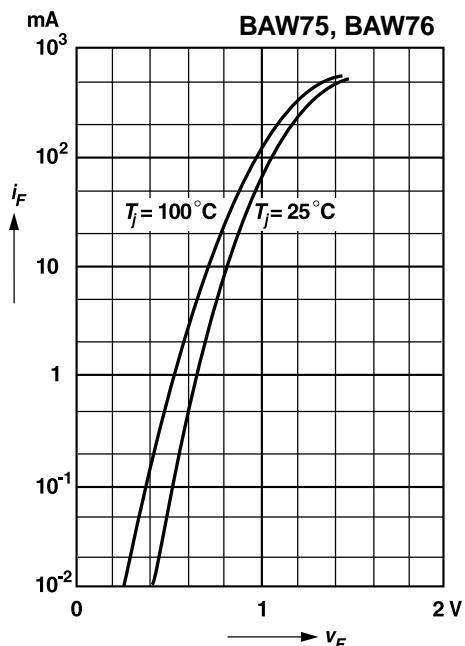
### **Electrical Characteristics** (T<sub>J</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage BAW75 BAW76	V <sub>F</sub>	at I <sub>F</sub> = 30mA at I <sub>F</sub> = 100mA	— —	— —	1 1	V
Leakage Current BAW75 BAW75 BAW76 BAW76	I <sub>R</sub>	V <sub>R</sub> = 25V	—	—	100	nA
		V <sub>R</sub> = 25V, T <sub>j</sub> = 150°C	—	—	100	μA
		V <sub>R</sub> = 50V	—	—	100	nA
		V <sub>R</sub> = 50V, T <sub>j</sub> = 150°C	—	—	100	μA
Reverse Breakdown Voltage BAW75 BAW76	V <sub>(BR)R</sub>	tested with 5μA pulses	35 75	— —	— —	V
Capacitance BAW75 BAW76	C <sub>tot</sub>	V <sub>F</sub> = V <sub>R</sub> = 0V	— —	— —	4 2	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = 10mA, I <sub>R</sub> = 10mA I <sub>rr</sub> = 1mA	—	—	4	ns
		I <sub>F</sub> = 10mA, I <sub>R</sub> = 1mA V <sub>R</sub> = 6V, R <sub>L</sub> = 100Ω	—	—	2	

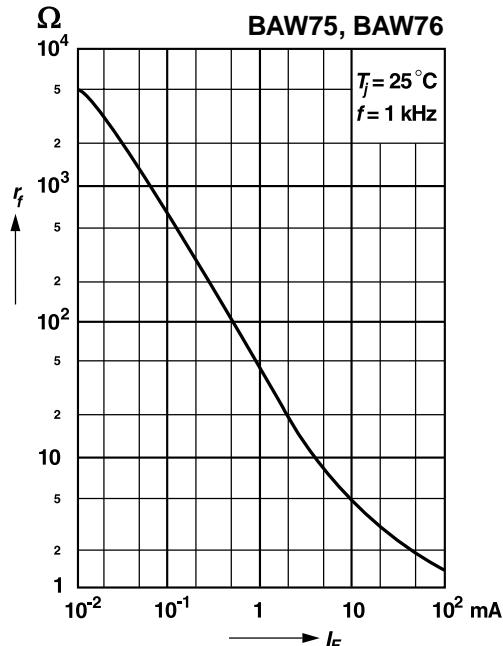
### Ratings and Characteristics

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

Forward characteristics

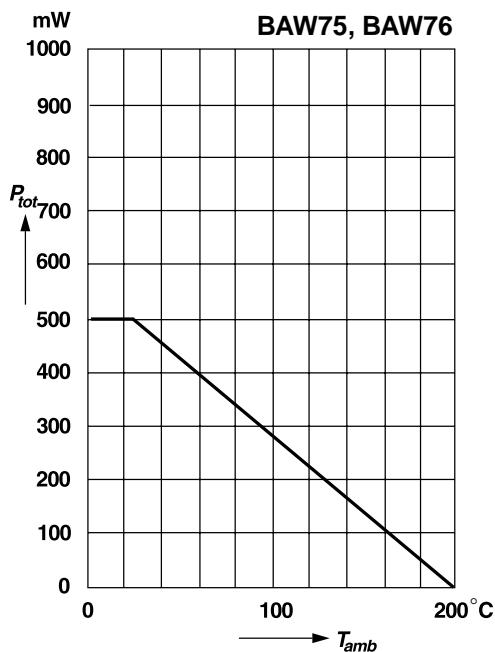


Dynamic forward resistance versus forward current

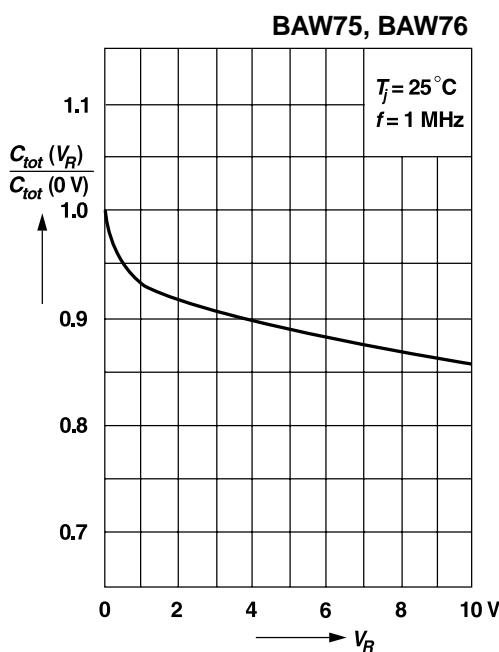


Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature



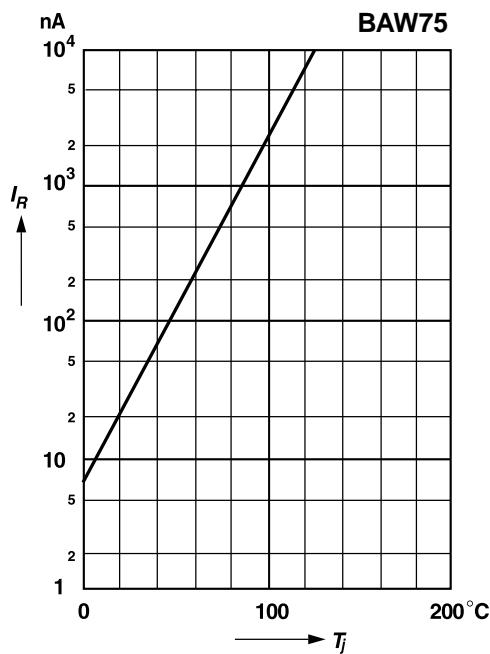
Relative capacitance versus reverse voltage



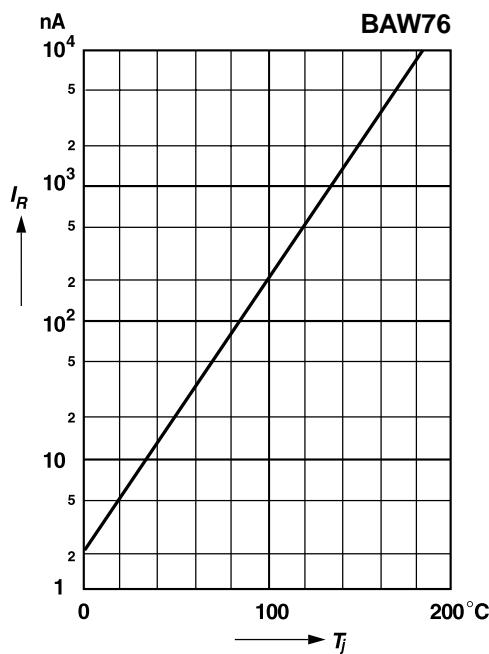
### Ratings and Characteristics

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

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"

