

# BAW75, BAW76

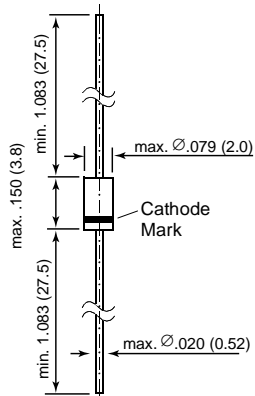
## SMALL SIGNAL DIODES

### FEATURES

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



### DO-35



### MECHANICAL DATA

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13 g

*Dimensions in inches and (millimeters)*

### MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

		SYMBOL	VALUE	UNIT
Reverse Voltage	<b>BAW75</b>	$V_R$	25	Volts
	<b>BAW76</b>	$V_R$	50	Volts
Peak Reverse Voltage	<b>BAW75</b>	$V_{RM}$	35	Volts
	<b>BAW76</b>	$V_{RM}$	75	Volts
Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_A = 25^\circ\text{C}$ and $f \geq 50\text{ Hz}$		$I_o$	150 <sup>(1)</sup>	mA
Surge Forward Current at $t < 1\mu\text{s}$ and $T_j = 25^\circ\text{C}$		$I_{FSM}$	2	Amps
Power Dissipation at $T_A = 25^\circ\text{C}$		$P_{tot}$	500 <sup>(1)</sup>	mW
Junction Temperature		$T_j$	200	°C
Storage Temperature Range		$T_s$	- 65 to +200	°C

#### NOTES

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

# BAW75, BAW76

## ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

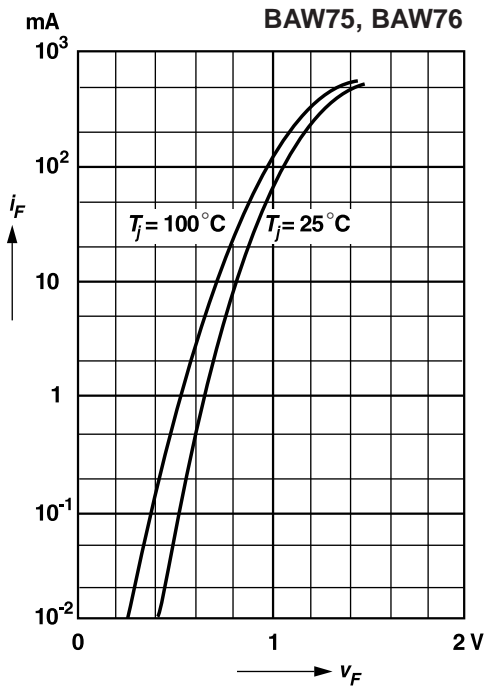
		<i>SYMBOL</i>	<i>MIN.</i>	<i>MAX.</i>	<i>UNIT</i>
Forward Voltage at $I_F = 30$ mA at $I_F = 100$ mA	<b>BAW75</b>	$V_F$	–	1	V
	<b>BAW76</b>	$V_F$	–	1	V
Leakage Current at $V_R = 25$ V at $V_R = 25$ V, $T_j = 150^\circ\text{C}$ at $V_R = 50$ V at $V_R = 50$ V, $T_j = 150^\circ\text{C}$	<b>BAW75</b>	$I_R$	–	100	nA
	<b>BAW75</b>	$I_R$	–	100	$\mu\text{A}$
	<b>BAW76</b>	$I_R$	–	100	nA
	<b>BAW76</b>	$I_R$	–	100	$\mu\text{A}$
Reverse Breakdown Voltage Tested with 5 $\mu\text{A}$ Pulses	<b>BAW75</b>	$V_{(BR)R}$	35	–	V
	<b>BAW76</b>	$V_{(BR)R}$	75	–	V
Capacitance at $V_F = V_R = 0$ V	<b>BAW75</b>	$C_{tot}$	–	4	pF
	<b>BAW76</b>	$C_{tot}$	–	2	pF
Reverse Recovery Time from $I_F = 10$ mA through $I_R = 10$ mA to $I_R = 1$ mA from $I_F = 10$ mA to $I_R = 1$ mA, $V_R = 6$ V, $R_L = 100 \Omega$		$t_{rr}$	–	4	ns
		$t_{rr}$	–	2	ns
Thermal Resistance Junction to Ambient Air		$R_{\theta JA}$	–	0.35 <sup>1)</sup>	K/mW

### NOTES:

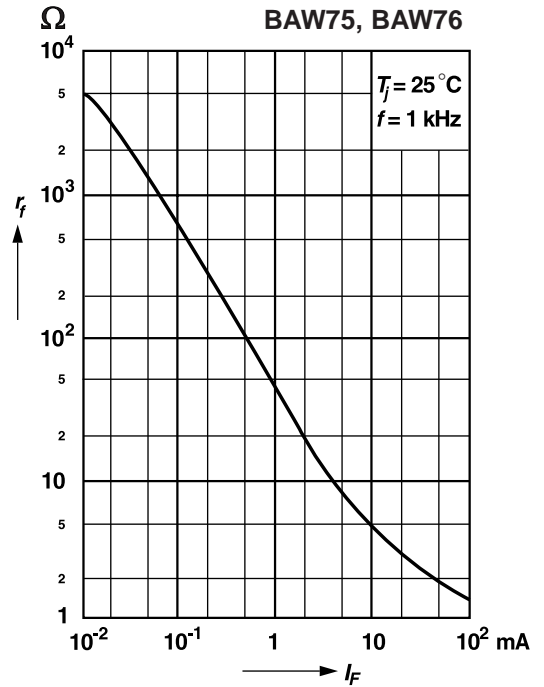
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# RATINGS AND CHARACTERISTICS CURVES BAW75, BAW76

Forward characteristics

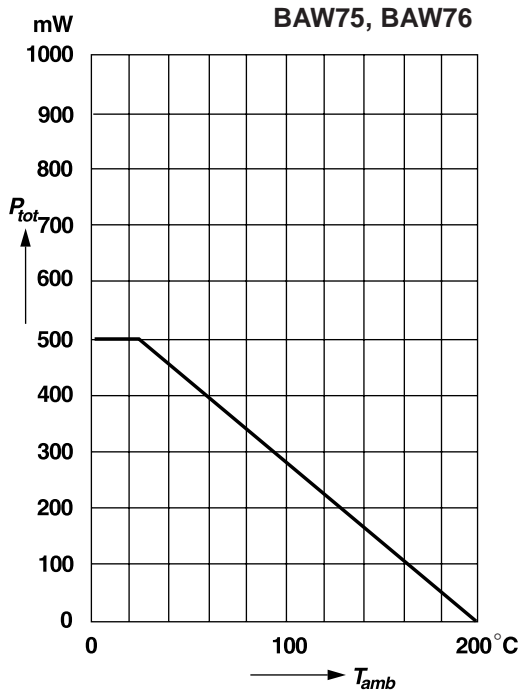


Dynamic forward resistance versus forward current

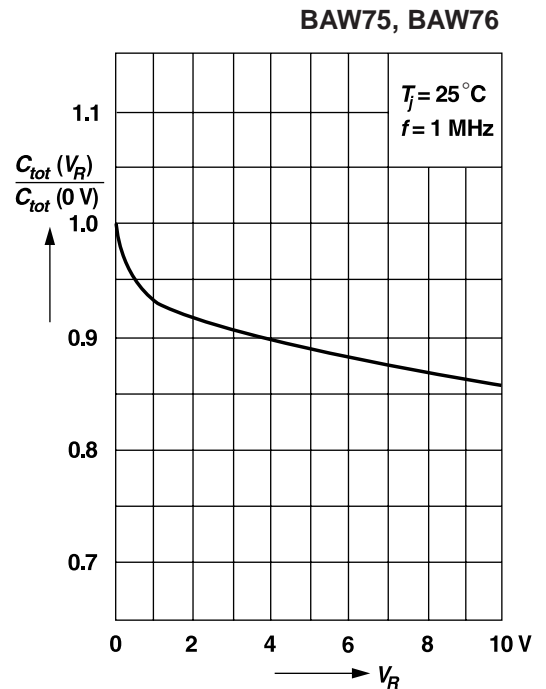


Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

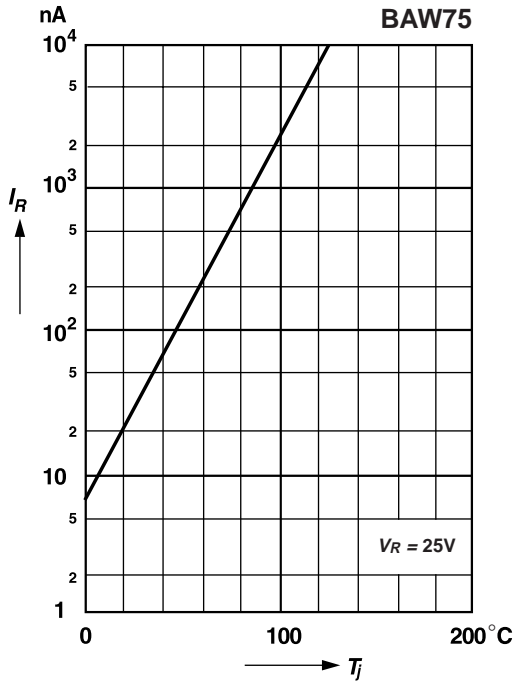


Relative capacitance versus reverse voltage

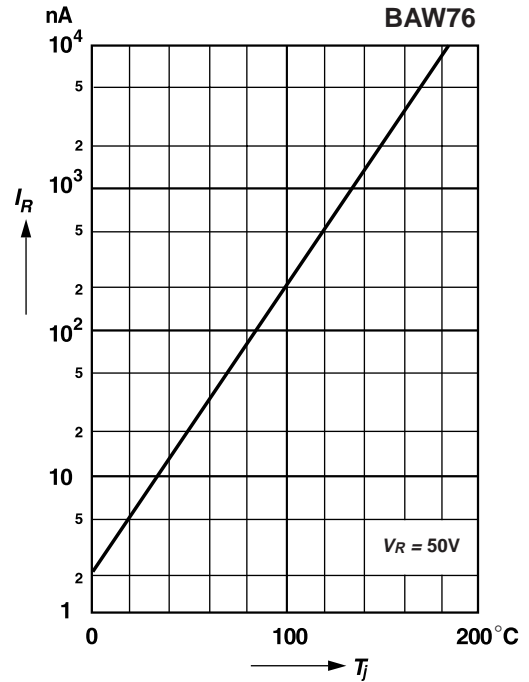


# RATINGS AND CHARACTERISTICS CURVES BAW75, BAW76

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"

