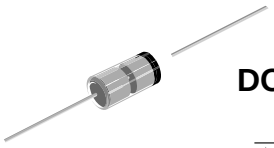
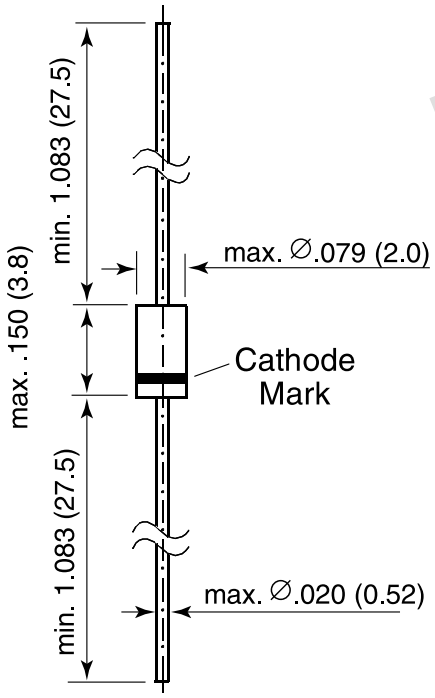
GENERAL SEMICONDUCTOR®

BAW75 and BAW76

Small-Signal Diodes



DO-204AH (DO-35 Glass)



Dimensions in inches and (millimeters)

New Product

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 (T_A = 25°C unless otherwise noted)

Parameter		Symbol	Value	Unit
Reverse Voltage	BAW75 BAW76	V_R	25 50	V
Peak Reverse Voltage	BAW75 BAW76	V_{RM}	35 75	V
Rectified Current (Average) Half Wave Rectification with Resistive Load at T_A = 25°C and f ≥ 50 Hz		I_O	150(1)	mA
Surge Forward Current at t < 1µs, T_j = 25°C		I_{FSM}	2	A
Power Dissipation at T_A = 25°C		P_{tot}	500(1)	mW
Thermal Resistance Junction to Ambient Air		$R_{\Theta JA}$	0.35(1)	°C/W
Junction Temperature		T_j	200	°C
Storage Temperature Range		T_S	–65 to +200	°C

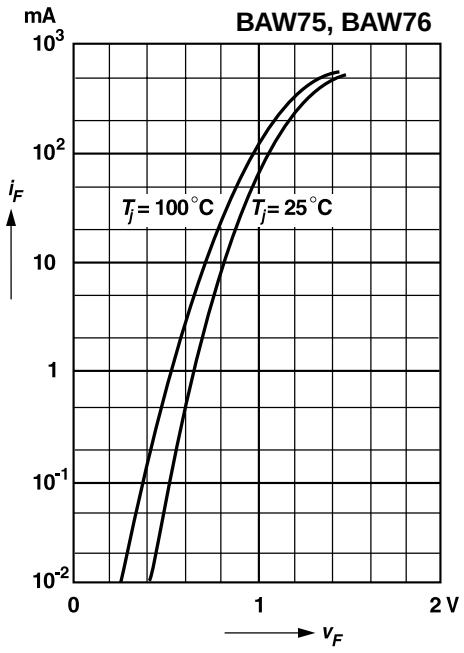
Note:
(1) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

Electrical Characteristics (T_J = 25°C unless otherwise noted)

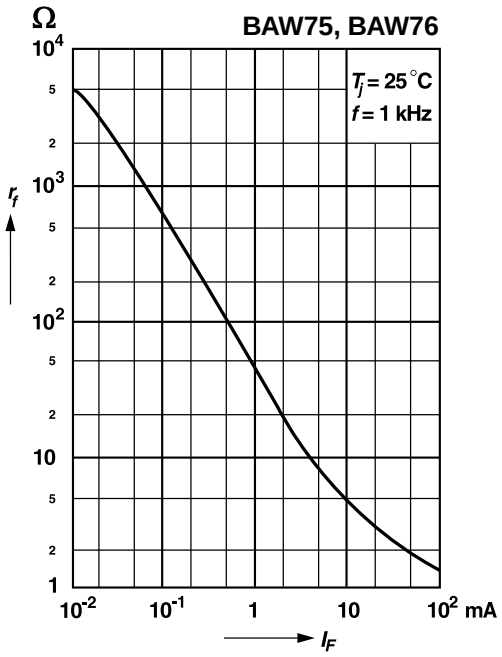
Parameter		Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	BAW75 BAW76	V_F	at I_F = 30mA at I_F = 100mA	— —	— —	1 1	V
Leakage Current	BAW75 BAW75 BAW76 BAW76	I_R	V_R = 25V V_R = 25V, T_j = 150°C V_R = 50V V_R = 50V, T_j = 150°C	— — — —	— — — —	100 100 100 100	nA µA nA µA
Reverse Breakdown Voltage	BAW75 BAW76	$V_{(BR)R}$	tested with 5µA pulses	35 75	— —	— —	V
Capacitance	BAW75 BAW76	C_{tot}	V_F = V_R = 0V	— —	— —	4 2	pF
Reverse Recovery Time		t_{rr}	I_F = 10mA, I_R = 10mA I_{rr} = 1mA I_F = 10mA, I_R = 1mA V_R = 6V, R_L = 100Ω	— —	— —	4 2	ns

Ratings and Characteristics (T$_A$ = 25°C unless otherwise noted)

Forward characteristics

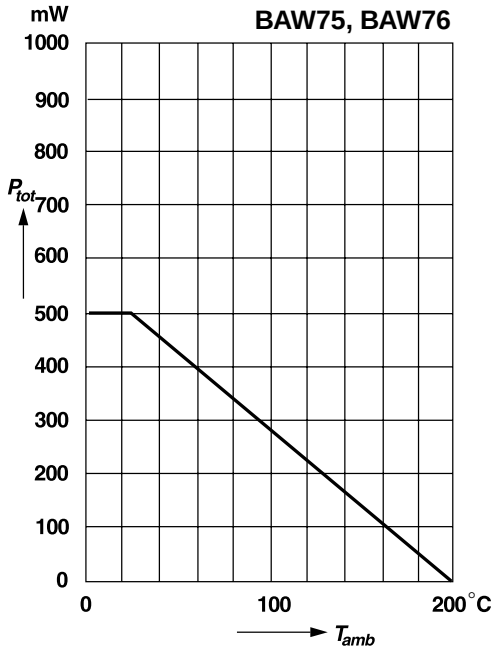


Dynamic forward resistance versus forward current

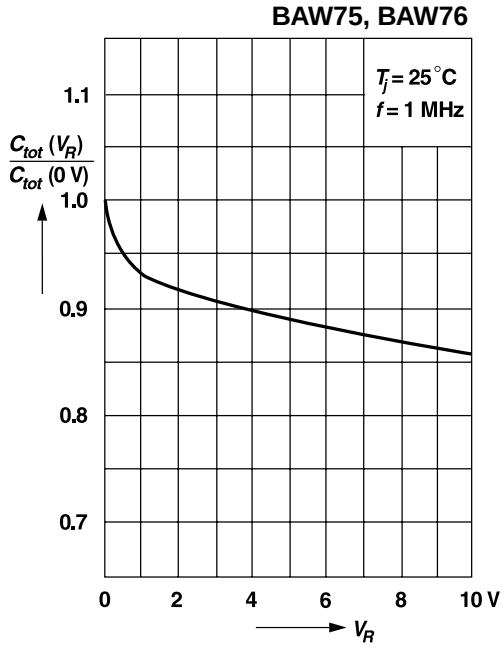


Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

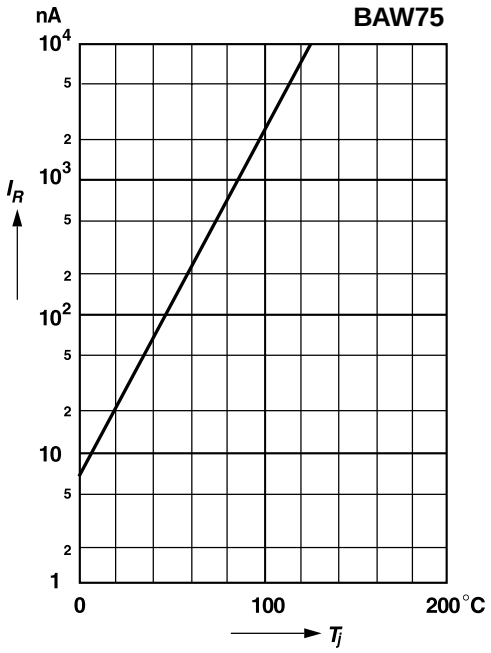


Relative capacitance versus reverse voltage

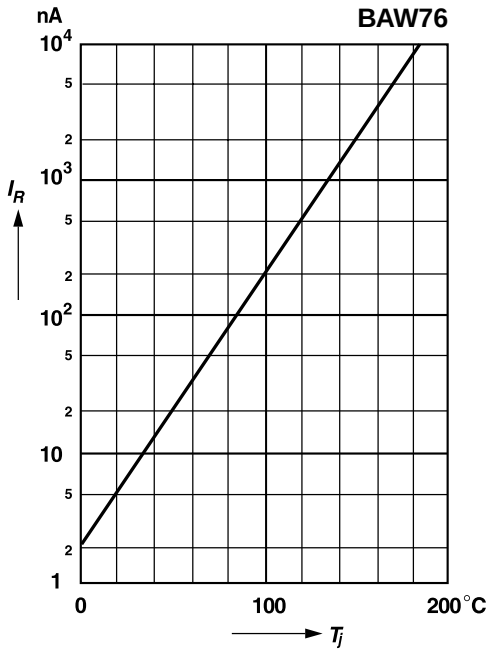


Ratings and Characteristics (T$_A$ = 25°C unless otherwise noted)

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"