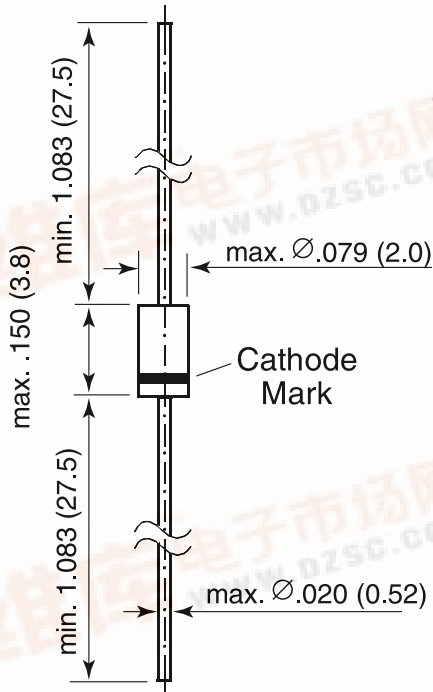


BAW75 and BAW76

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:

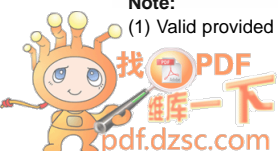
- D7/10K per 13" reel (52mm tape), 20K/box
- D8/10K per Ammo tape (52mm tape), 20K/box

Maximum Ratings and Thermal Characteristics (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 _{θJA}	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.



BAW75 and BAW76

Small-Signal Diodes

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

Parameter		Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	BAW75	V _F	at I _F = 30mA	—	—	1	V
	BAW76		at I _F = 100mA	—	—	1	
Leakage Current	BAW75	I _R	V _R = 25V	—	—	100	nA
	BAW75		V _R = 25V, T _j = 150°C	—	—	100	μA
	BAW76		V _R = 50V	—	—	100	nA
	BAW76		V _R = 50V, T _j = 150°C	—	—	100	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	—	—	4	ns
			I _F = 10mA, I _R = 1mA V _R = 6V, R _L = 100Ω	—	—	2	

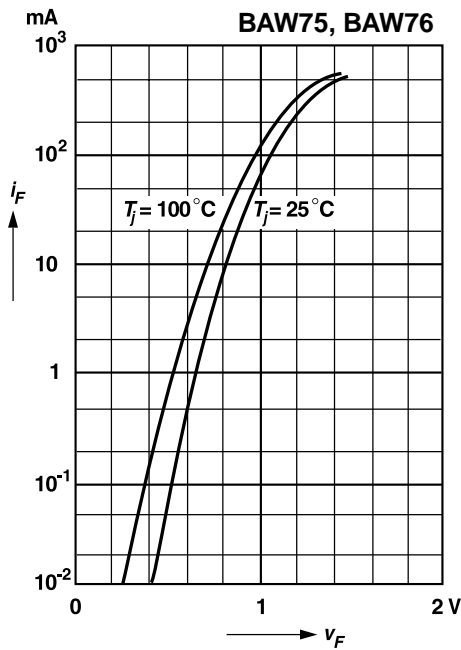
BAW75 and BAW76

Small-Signal Diodes

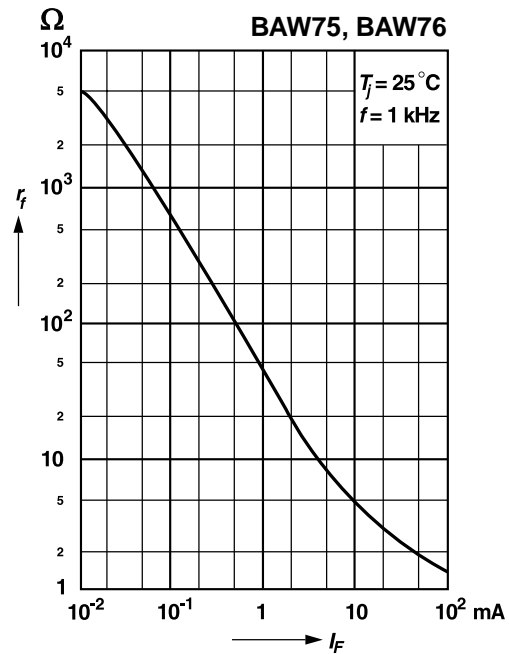
Ratings and Characteristics

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

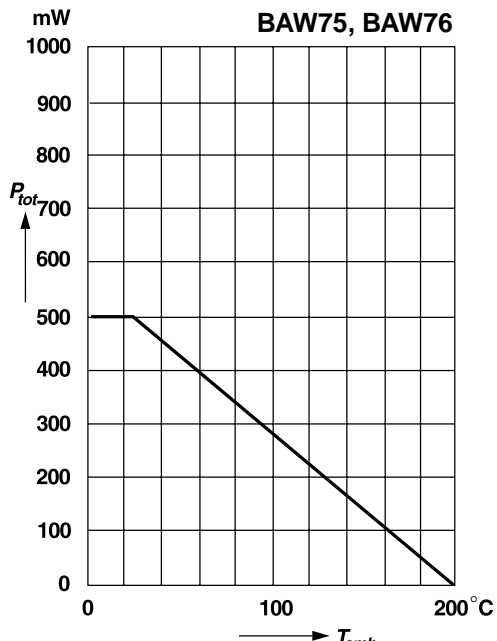
Forward characteristics



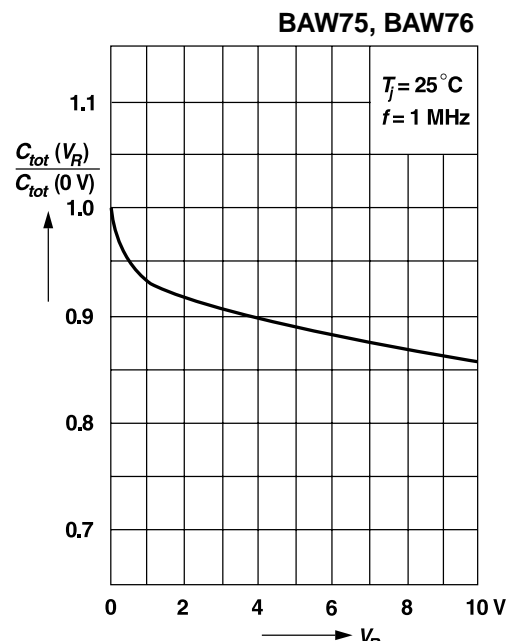
Dynamic forward resistance versus forward current



Admissible power dissipation versus ambient temperature
Valid provided that electrodes are kept at ambient temperature

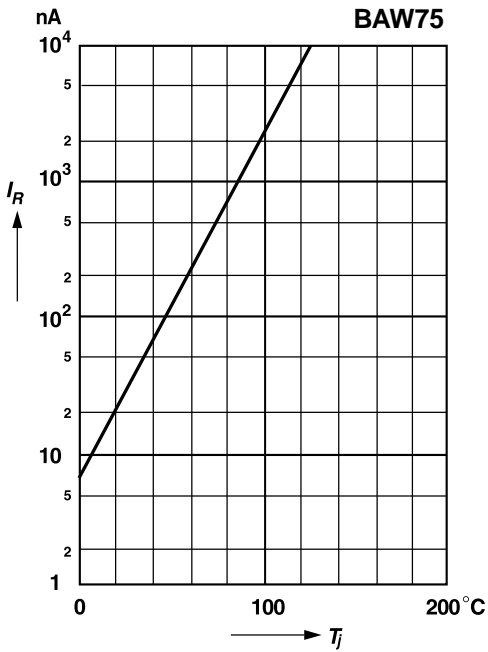


Relative capacitance versus reverse voltage

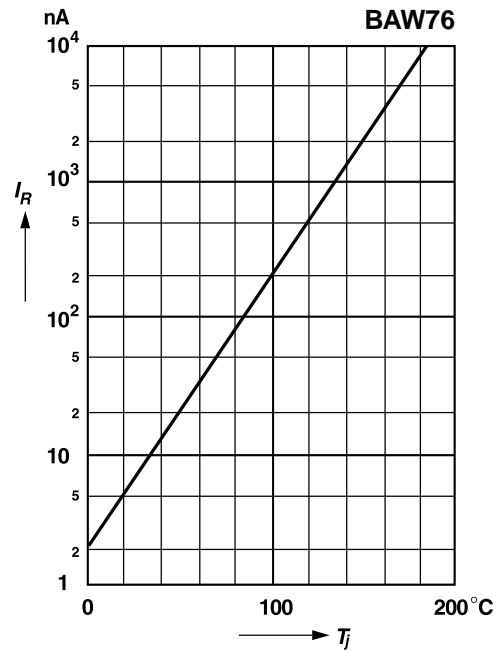


Ratings and Characteristics (T_A = 25°C unless otherwise noted)

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"

