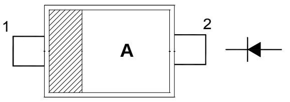
SOD-523
BAS216WT

Silicon Epitaxial Planar Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



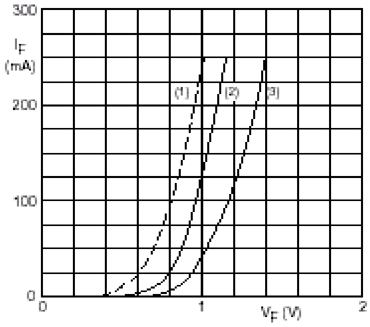
Top View
Marking Code: "**A**"
Simplified outline SOD-523 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	85	V
Reverse Voltage	V_R	75	V
Continuous Forward Current	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current at t = 1 μs at t = 1 ms at t = 1 s	I_{FSM}	4 1 0.5	A
Power Dissipation	P_{tot}	150	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

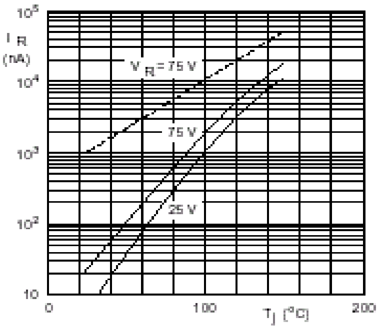
Characteristics at T_a = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage at I_F = 1 mA at I_F = 10 mA at I_F = 50 mA at I_F = 150 mA	V_F	715 855 1000 1250	mV
Reverse Current at V_R = 25 V at V_R = 75 V at V_R = 25 V, T_J = 150 °C at V_R = 75 V, T_J = 150 °C	I_R	30 1 30 50	nA μA μA μA
Diode Capacitance at V_R = 0 V, f = 1 MHz	C_{tot}	1.5	pF
Reverse Recovery Time at I_F = 10 mA to I_R = 10 mA, I_R = 1 mA, R_L = 100 Ω	t_{rr}	4	ns



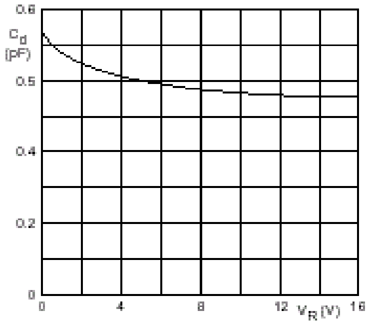
(1) T_j = 150 °C; typical values.
(2) T_j = 25 °C; typical values.
(3) T_j = 25 °C; maximum values.

Forward current as a function of forward voltage.



Dotted line: maximum values.
Solid lines: typical values.

Reverse current as a function of junction temperature.



f = 1 MHz; T_j = 25 °C.

Diode capacitance as a function of reverse voltage; typical values.