

Features

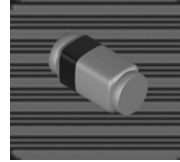
- ◆ Silicon Epitaxial Planar Diodes

Applications

- ◆ General purposes

Mechanical Data

- ◆ Case:QuadroMELF Glass Case (SOD-80)
- ◆ Weight: approx. 34 mg
- ◆ Cathode Band Color: Black



■ Absolute Maximum Ratings

($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Test Condition	Part	Symbol	Value	Unit
Peak reverse voltage		BAV200	V_{RRM}	60	V
		BAV201	V_{RRM}	120	V
		BAV202	V_{RRM}	200	V
		BAV203	V_{RRM}	250	V
Reverse voltage		BAV200	V_R	50	V
		BAV201	V_R	100	V
		BAV202	V_R	150	V
		BAV203	V_R	200	V
Forward current			I_F	250	mA
Peak forward surge current	$t_p=1\text{ s}, T=25^{\circ}\text{C}$		I_{FSM}	1	A
Forward peak current	$f=50\text{Hz}$		I_{FM}	625	mA

■ Thermal Characteristics

($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Test Condition	Symbol	Value	Unit
Junction ambient	on PC board 50 mm X 50mm X 1.6mm	R_{thJA}	500	K/W
Junction temperature		T_J	175	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-65 to +175	$^{\circ}\text{C}$

■ Electrical Characteristics

($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Test Condition	Part	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F=100\text{mA}$		V_F			1	V
Reverse current	$V_R=50\text{V}$	BAV200	I_R			100	nA
	$V_R=100\text{V}$	BAV201	I_R			100	nA
	$V_R=150\text{V}$	BAV202	I_R			100	nA
	$V_R=200\text{V}$	BAV203	I_R			100	nA
	$T_J=100^{\circ}\text{C}, V_R=50\text{V}$	BAV200	I_R			15	μA
	$T_J=100^{\circ}\text{C}, V_R=100\text{V}$	BAV201	I_R			15	μA
	$T_J=100^{\circ}\text{C}, V_R=150\text{V}$	BAV202	I_R			15	μA
Breakdown voltage	$I_R=100\mu\text{A}, t_p/T=0.01, t_p=0.3\text{ms}$	BAV200	$V_{(BR)}$		60		V
	$I_R=100\mu\text{A}, t_p/T=0.01, t_p=0.3\text{ms}$	BAV201	$V_{(BR)}$		120		V
	$I_R=100\mu\text{A}, t_p/T=0.01, t_p=0.3\text{ms}$	BAV202	$V_{(BR)}$		200		V
	$I_R=100\mu\text{A}, t_p/T=0.01, t_p=0.3\text{ms}$	BAV203	$V_{(BR)}$		250		V
Diode capacitance	$V_R=0, f=1\text{MHz}$		C_D		1.5		pF
Differential forward resistance	$I_F=10\text{mA}$		r_f		5		Ω
Reverse recovery time	$I_F=I_R=30\text{mA}, i_R=3\text{mA}, R_L=100\Omega$		t_{rr}			50	ns

Typical characteristics

($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)

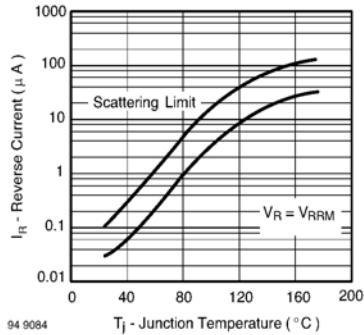


Fig. 1 Reverse Current vs. Junction Temperature

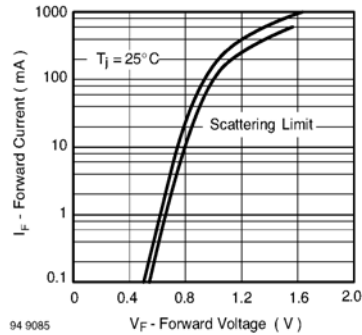


Fig. 2 Forward Current vs. Forward Voltage

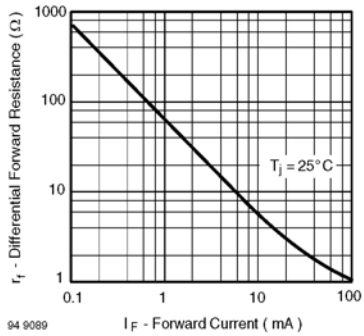


Fig. 3 Differential Forward Resistance vs. Forward Current

Package Dimensions in mm (inches)

