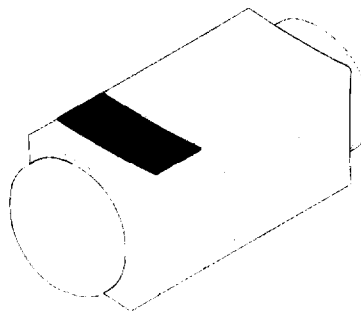


Silicon Planar Diodes

Features

- Low differential forward resistance
- Low diode capacitance
- High reverse impedance
- Quadro Melf package



94 9373

Applications

Band switching in VHF-tuners

Absolute Maximum Ratings

$T_J = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage			V_R	35	V
Forward current			I_F	100	mA
Junction temperature			T_J	150	$^\circ\text{C}$
Storage temperature range			T_{stg}	-55...+150	$^\circ\text{C}$

Maximum Thermal Resistance

$T_J = 25^\circ\text{C}$

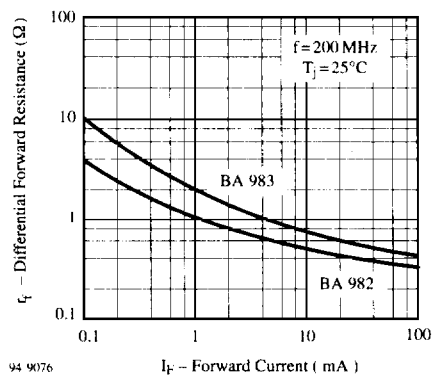
Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mmx50mmx1.6mm	R_{thJA}	500	K/W

Characteristics

$T_j = 25^\circ\text{C}$

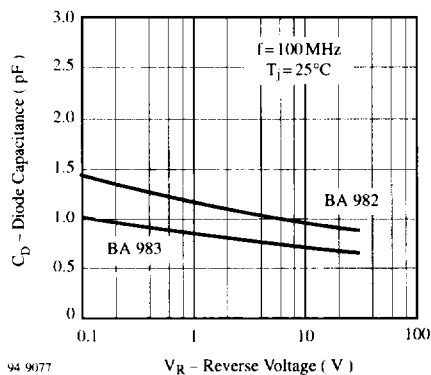
Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=100\text{mA}$		V_F			1	V
Reverse current	$V_R=20\text{V}$		I_R			50	nA
Diode capacitance	$f=100\text{MHz}, V_R=1\text{V}$		C_D			1.5	pF
	$f=100\text{MHz}, V_R=3\text{V}$	BA982	C_D			1.25	pF
		BA983	C_D			1.2	pF
Differential forward resistance	$f=200\text{MHz}, I_F=3\text{mA}$	BA982	r_f			0.7	Ω
		BA983	r_f			1.2	Ω
	$f=200\text{MHz}, I_F=10\text{mA}$	BA982	r_f			0.5	Ω
		BA983	r_f			0.9	Ω

Typical Characteristics ($T_j = 25^\circ\text{C}$ unless otherwise specified)



94 9076

I_F - Forward Current (mA)



94 9077

V_R - Reverse Voltage (V)

Figure 1 : Differential Forward Resistance vs. Forward Current

Figure 2 : Diode Capacitance vs. Reverse Voltage

Dimensions in mm

