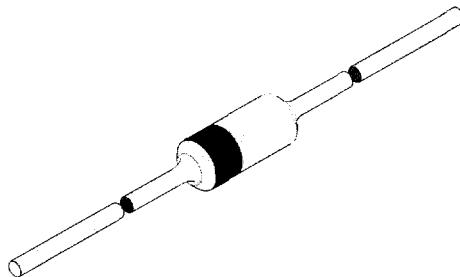


Silicon Planar Diodes

Features

- Low differential forward resistance
- Low diode capacitance
- High reverse impedance



94 9367

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	°C
Storage temperature range			T_{stg}	-55...+150	°C

Maximum Thermal Resistance

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

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	$I=4\text{mm}, T_L=\text{constant}$	R_{thJA}	350	K/W

BA282.BA283

Vishay Telefunken

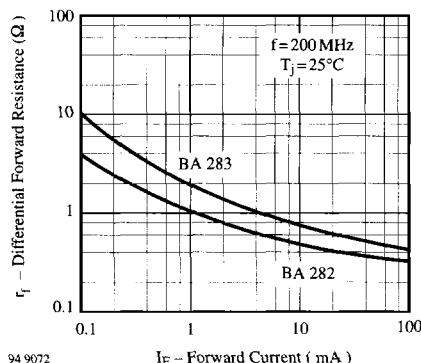


Electrical Characteristics

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

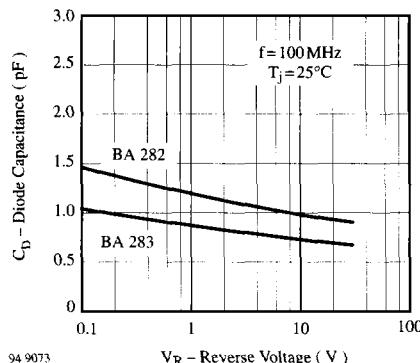
Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=100\text{mA}$		V_F			1	V
Reverse current	$V_R=20\text{ V}$		I_R			50	nA
Diode capacitance	$f=100\text{MHz}, V_R=1\text{V}$	BA282	C_D			1.5	pF
	$f=100\text{MHz}, V_R=3\text{V}$		C_D			1.25	pF
Differential forward resistance	$f=200\text{MHz}, I_F=3\text{mA}$	BA282	r_f			0.7	Ω
		BA283	r_f			1.2	Ω
	$f=200\text{MHz}, I_F=10\text{mA}$	BA282	r_f			0.5	Ω
		BA283	r_f			0.9	Ω
Reverse impedance	$f=100\text{MHz}, V_R=1\text{V}$		Z_f	100			$k\Omega$

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



94 9072

I_F - Forward Current (mA)



94 9073

V_R - Reverse Voltage (V)

Figure 1. Differential Forward Resistance vs. Forward Current

Figure 2. Diode Capacitance vs. Reverse Voltage

Dimensions in mm

