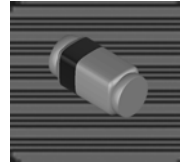


Features

- Silicon Epitaxial Planar Diode
- Electrical data identical with the device 1N4150
- Quadro Melf package



Applications

- High speed switch and general purpose use in computer and industrial applications

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	Symbol	Value	Unit
Repetitive peak reverse voltage		V_{RRM}	50	V
Reverse voltage		V_R	50	V
Peak forward surge current	$t_p = 1 \mu\text{s}$	I_{FSM}	4	A
Forward current		I_F	600	mA
Average forward current	$V_R = 0$	I_{FAV}	300	mA
Power dissipation		P_V	500	mW

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	$R_{\theta JA}$	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	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F=1\text{mA}$	V_F	0.54		0.62	V
	$I_F=10\text{mA}$		0.66		0.74	
	$I_F=50\text{mA}$		0.76		0.86	
	$I_F=100\text{mA}$		0.82		0.92	
	$I_F=200\text{mA}$		0.87		1.0	
Reverse current	$V_R=50\text{V}$	I_R			100	nA
	$V_R=50\text{V}, T_J=150^{\circ}\text{C}$				100	
Diode capacitance	$V_R=0, f=1\text{MHz}, V_{rf}=50\text{mV}$	C_D			2.5	pF
Reverse recovery time	$I_F=I_R=10$ to 100mA , $I_R=0.1 \times I_F, R_L=100\Omega$	t_{rr}			4	ns

■ Typical characteristics

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

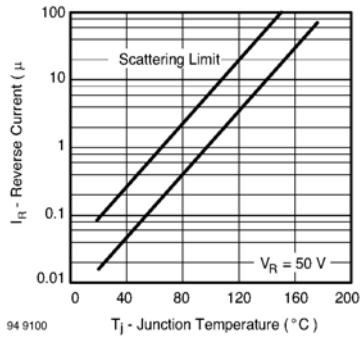


Fig. 1 Reverse Current vs. Junction Temperature

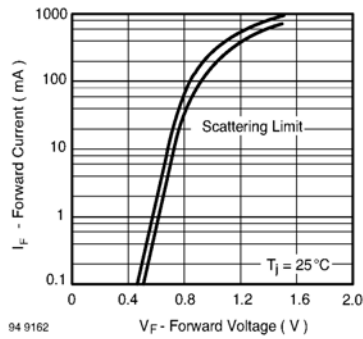


Fig. 2 Forward Current vs. Forward Voltage

Package Dimensions in mm (inches)

