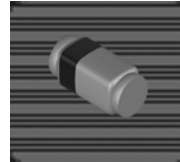


Features

- Silicon Epitaxial Planar Diode
- Electrical data identical with the device 1N4154
- Quadro Melf package

Applications

- Extreme fast switches



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}	35	V
Reverse voltage		V_R	25	V
Peak forward surge current	$t_p = 1 \text{ us}$	I_{FSM}	2	A
Repetitive peak forward current		I_{FRM}	500	mA
Forward current		I_F	300	mA
Average forward current	$V_R=0$	I_{FAV}	150	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_{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	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F=30\text{mA}$	V_F			1	V
Reverse current	$V_R=25\text{V}$	I_R			100	nA
	$V_R=25\text{V}, T_J=150^{\circ}\text{C}$				100	μA
Breakdown voltage	$I_R=5\mu\text{A}, t_p/T=0.01, t_p=0.3\text{ms}$	$V_{(BR)}$	35			V
Diode capacitance	$V_R=0, f=1\text{MHz}, V_{RF}=50\text{mV}$	C_D			4	pF
Reverse recovery time	$I_F=I_R=10\text{mA}, i_R=1\text{mA}$	t_{rr}			4	ns
	$I_F=10\text{mA}, V_R=6\text{V}, i_R=0.1 \times I_R, R_L=100\Omega$				2	

Typical characteristics

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

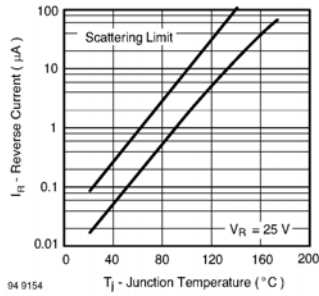


Fig. 1 Reverse Current vs. Junction Temperature

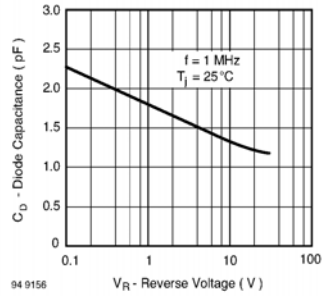


Fig. 3 Diode Capacitance vs. Reverse Voltage

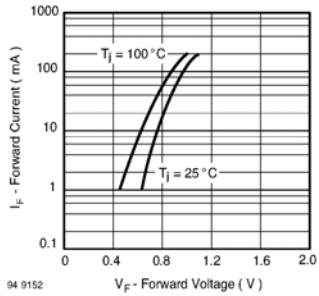
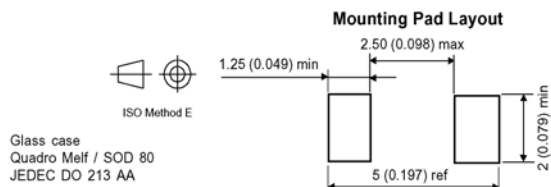
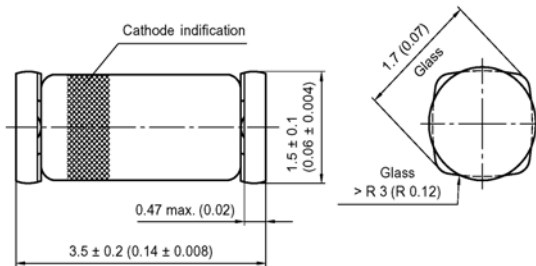


Fig. 2 Forward Current vs. Forward Voltage

Package Dimensions in mm (inches)



Glass case
Quadro Melf / SOD 80
JEDEC DO 213 AA