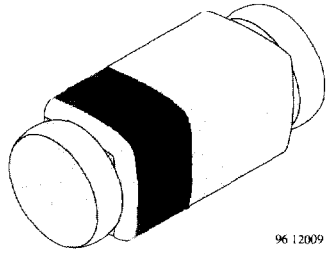
Silicon Epitaxial Planar Diode

Features

- Electrical data identical with the device 1N4150
- Quadro Melf package



Applications

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

Absolute Maximum Ratings

$T_j = 25°C$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Repetitive peak reverse voltage			V_{RRM}	50	V
Reverse voltage			V_R	50	V
Peak forward surge current	t_p=1µs		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
Junction temperature			T_j	175	°C
Storage temperature range			T_{stg}	–65...+175	°C

Maximum Thermal Resistance

$T_j = 25°C$

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

Electrical Characteristics

T_j = 25°C

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=1mA		V_F	0.54		0.62	V
	I_F=10mA		V_F	0.66		0.74	V
	I_F=50mA		V_F	0.76		0.86	V
	I_F=100mA		V_F	0.82		0.92	V
	I_F=200mA		V_F	0.87		1.0	V
Reverse current	V_R=50V		I_R			100	nA
	V_R=50V, T_j=150°C		I_R			100	nA
Diode capacitance	V_R=0, f=1MHz, V_{HF}=50mV		C_D			2.5	pF
Reverse recovery time	I_F=I_R=10...100mA, i_R=0.1xI_R, R_L=100Ω		t_{rr}			4	ns

Characteristics (T_j = 25°C unless otherwise specified)

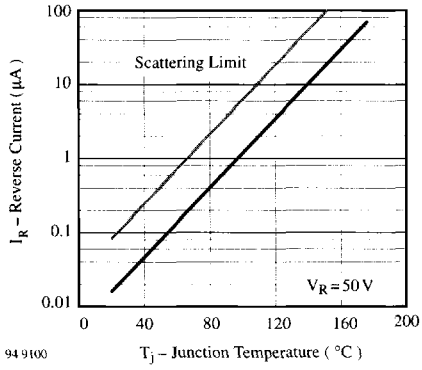


Figure 1. Reverse Current vs. Junction Temperature

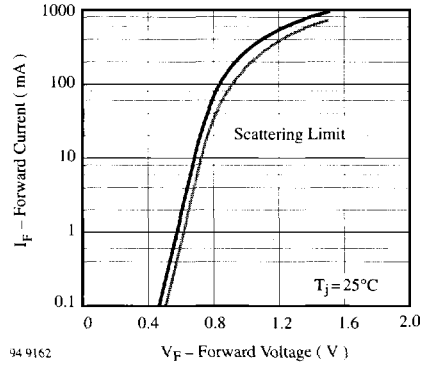
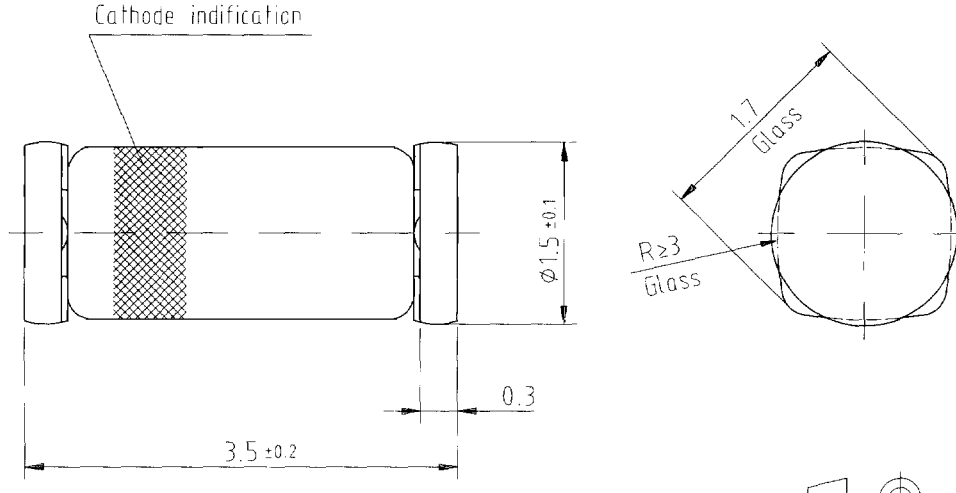


Figure 2. Forward Current vs. Forward Voltage

Dimensions in mm



Glass case
Quadro MELF
similar to JEDEC 213 AA

96 12071

technical drawings according to DIN specifications