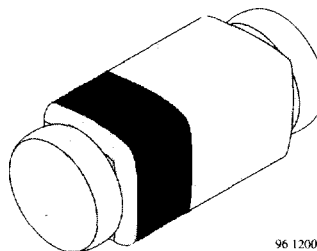




## Silicon Epitaxial Planar Diodes

### Applications

General purposes



96 12009

### Absolute Maximum Ratings

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

Parameter	Test Conditions	Type	Symbol	Value	Unit
Peak reverse voltage		BAV200	$V_{RRM}$	60	V
		BAV201	$V_{RRM}$	120	V
		BAV202	$V_{RRM}$	200	V
		BAV203	$V_{RRM}$	250	V
Reverse voltage		BAV200	$V_R$	50	V
		BAV201	$V_R$	100	V
		BAV202	$V_R$	150	V
		BAV203	$V_R$	200	V
Forward current			$I_F$	250	mA
Peak forward surge current	$t_p=1\text{s}, T_j=25^\circ\text{C}$		$I_{FSM}$	1	A
Forward peak current	$f=50\text{Hz}$		$I_{FM}$	625	mA
Junction temperature			$T_j$	175	$^\circ\text{C}$
Storage temperature range			$T_{stg}$	-65...+175	$^\circ\text{C}$

### 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

**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	$V_R=50\text{V}$	BAV200	$I_R$			100	nA
	$V_R=100\text{V}$	BAV201	$I_R$			100	nA
	$V_R=150\text{V}$	BAV202	$I_R$			100	nA
	$V_R=200\text{V}$	BAV203	$I_R$			100	nA
	$T_j=100^\circ\text{C}, V_R=50\text{V}$	BAV200	$I_R$			15	$\mu\text{A}$
	$T_j=100^\circ\text{C}, V_R=100\text{V}$	BAV201	$I_R$			15	$\mu\text{A}$
	$T_j=100^\circ\text{C}, V_R=150\text{V}$	BAV202	$I_R$			15	$\mu\text{A}$
	$T_j=100^\circ\text{C}, V_R=200\text{V}$	BAV203	$I_R$			15	$\mu\text{A}$
Breakdown voltage	$I_R=100\mu\text{A}, t_p/T=0.01, t_p=0.3\text{ms}$	BAV200	$V_{(BR)}$	60			V
		BAV201	$V_{(BR)}$	120			V
		BAV202	$V_{(BR)}$	200			V
		BAV203	$V_{(BR)}$	250			V
Diode capacitance	$V_R=0, f=1\text{MHz}$		$C_D$		1.5		pF
Differential forward resistance	$I_F=10\text{mA}$		$r_f$		5		$\Omega$
Reverse recovery time	$I_F=I_R=30\text{mA}, i_R=3\text{mA}, R_L=100\Omega$		$t_{rr}$			50	ns

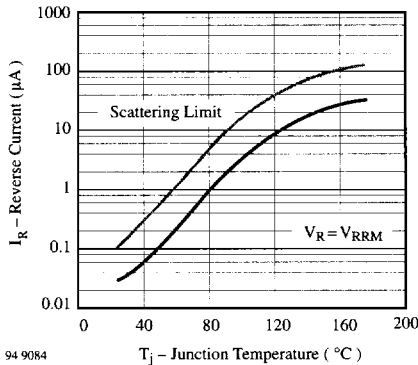
**Characteristics ( $T_j = 25^\circ\text{C}$  unless otherwise specified)**


Figure 1. Reverse Current vs. Junction Temperature

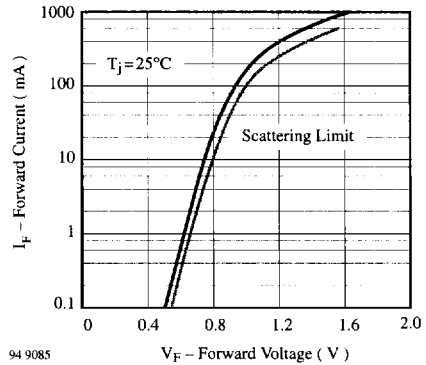


Figure 2. Forward Current vs. Forward Voltage

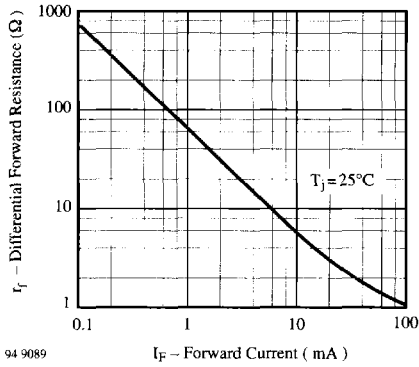
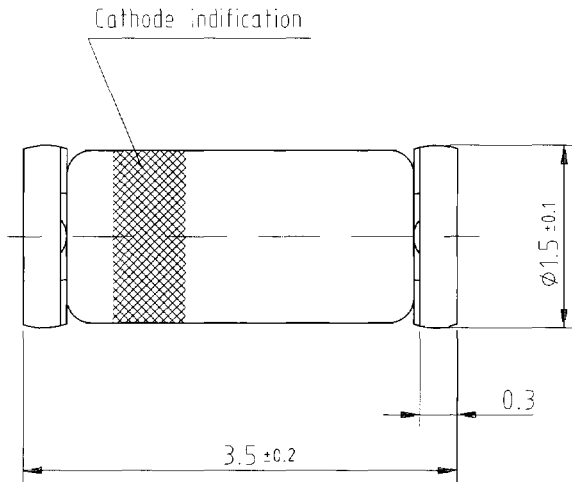
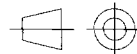
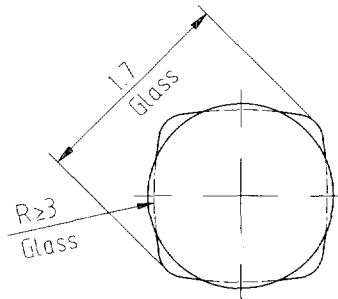


Figure 3. Differential Forward Resistance vs. Forward Current

**Dimensions in mm**



Glass case  
Quadro MELF  
similar to JEDEC 213 AA



technical drawings  
according to DIN  
specifications

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