



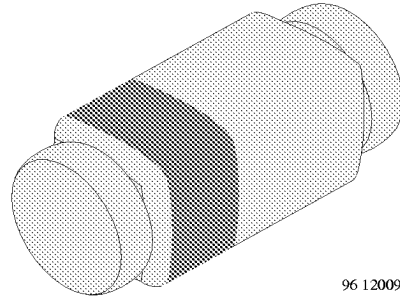
Silicon Planar Diodes

Features

- Very low reverse current

Applications

Protection circuits, time delay circuits, peak follower circuits, logarithmic amplifiers



96 12009

Absolute Maximum Ratings

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

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage		BAQ133	V_R	30	V
		BAQ134	V_R	60	V
		BAQ135	V_R	125	V
Peak forward surge current	$t_p = 1\mu\text{s}$		I_{FSM}	2	A
Forward current			I_F	200	mA
Junction temperature			T_j	200	$^\circ\text{C}$
Storage temperature range			T_{stg}	-65...+200	$^\circ\text{C}$

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	$E \leq 300\text{lx}$, V_R		I_R		1	3	nA
	$E \leq 300\text{lx}$, V_R , $T_j = 125^\circ\text{C}$		I_R			0.5	μA
	$E \leq 300\text{lx}$, $V_R = 15\text{V}$	BAQ133	I_R		0.5	1	nA
	$E \leq 300\text{lx}$, $V_R = 30\text{V}$	BAQ134	I_R		0.5	1	nA
	$E \leq 300\text{lx}$, $V_R = 60\text{V}$	BAQ135	I_R		0.5	1	nA
Breakdown voltage	$I_R = 5\mu\text{A}$, $t_p/T = 0.01$, $t_p = 0.3\text{ms}$	BAQ133	$V_{(BR)}$	40			V
		BAQ134	$V_{(BR)}$	70			V
		BAQ135	$V_{(BR)}$	140			V
Diode capacitance	$V_R = 0$, $f = 1\text{MHz}$		C_D			3	pF

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

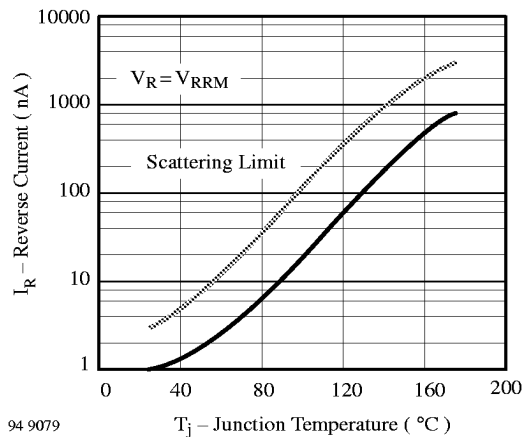


Figure 1. Reverse Current vs. Junction Temperature

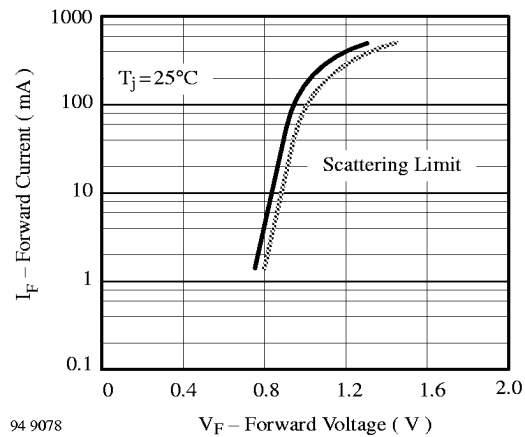
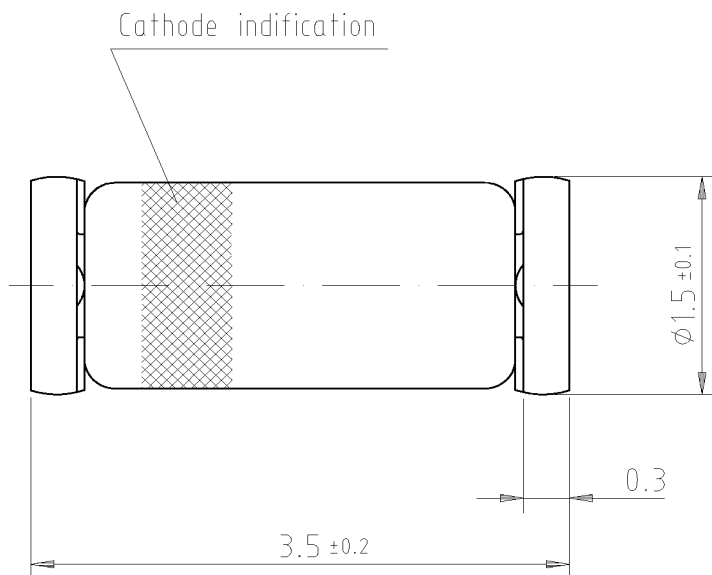
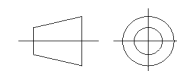
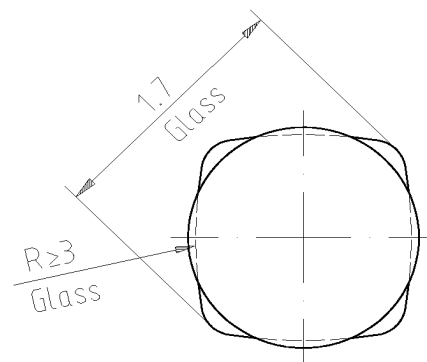


Figure 2. Forward Current vs. Forward Voltage

Dimensions in mm



Glass case
Quadro MELF
similar to JEDEC 213 AA



technical drawings
according to DIN
specifications

96 12071