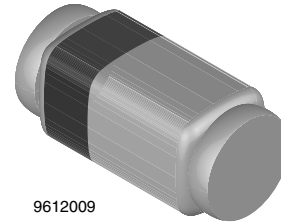


Small Signal Schottky Diode

Features

- Integrated protection ring against static discharge
- Very low forward voltage
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC



Applications

- Applications where a very low forward voltage is required

Mechanical Data

Case: QuadromELF SOD-80

Weight: approx. 34 mg

Cathode band color: black

Packaging codes/options:

GS18/10 k per 13" reel (8 mm tape), 10 k/box

GS08/2.5 k per 7" reel (8 mm tape), 12.5 k/box

Parts Table

Part	Ordering code	Type Marking	Remarks
BAS286	BAS286-GS18 or BAS286-GS08	-	Tape and Reel

Absolute Maximum Ratings

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

Parameter	Test condition	Symbol	Value	Unit
Reverse voltage		V_R	50	V
Peak forward surge current	$t_p = 10\text{ ms}$	I_{FSM}	5	A
Repetitive peak forward current	$t_p \leq 1\text{ s}$	I_{FRM}	500	mA
Forward continuous current		I_F	200	mA
Average forward current		I_{FAV}	200	mA

Thermal Characteristics

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

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air	on PC board 50 mm x 50 mm x 1.6 mm	R_{thJA}	320	K/W
Junction temperature		T_j	125	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

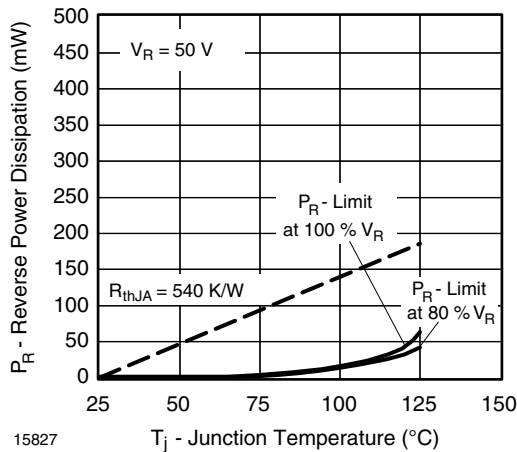
Electrical Characteristics

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

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Forward voltage	$I_F = 0.1\text{ mA}$	V_F			300	mV
	$I_F = 1\text{ mA}$	V_F			380	mV
	$I_F = 10\text{ mA}$	V_F			450	mV
	$I_F = 30\text{ mA}$	V_F			600	mV
	$I_F = 100\text{ mA}$	V_F			900	mV
Reverse current	$V_R = 40\text{ V}$	I_R			5	μA
Diode capacitance	$V_R = 1\text{ V}, f = 1\text{ MHz}$	C_D			8	pF

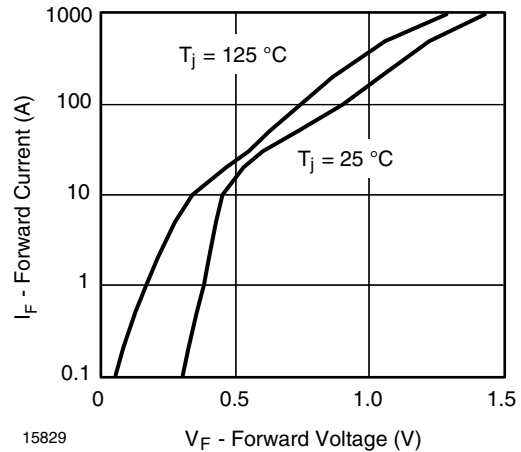
Typical Characteristics

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



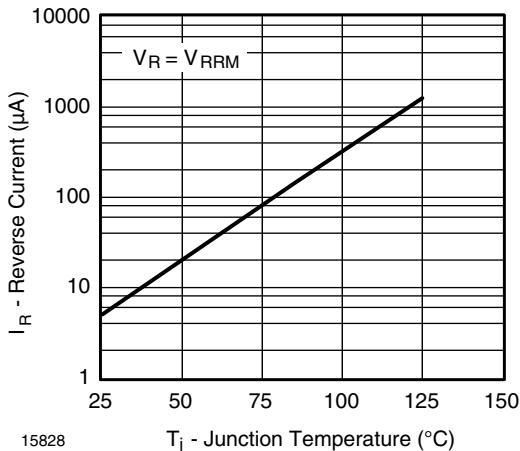
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Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature



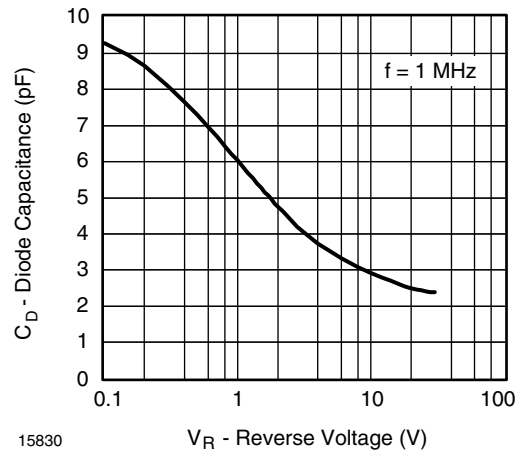
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Figure 3. Forward Current vs. Forward Voltage



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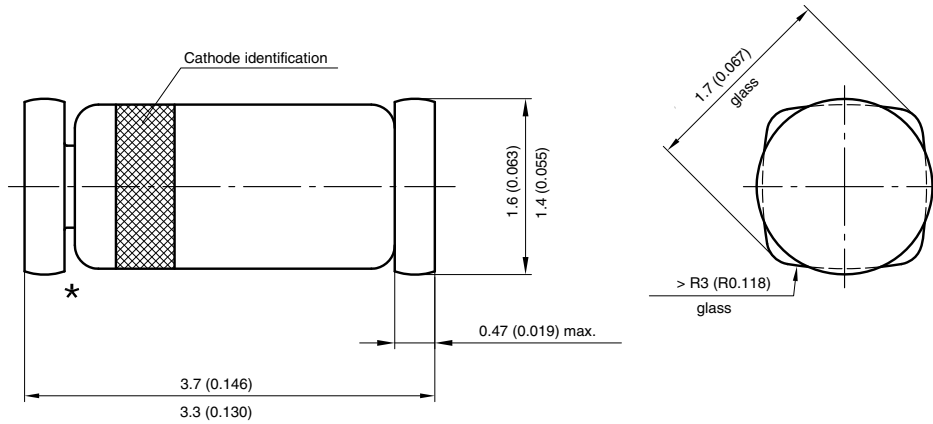
Figure 2. Reverse Current vs. Junction Temperature



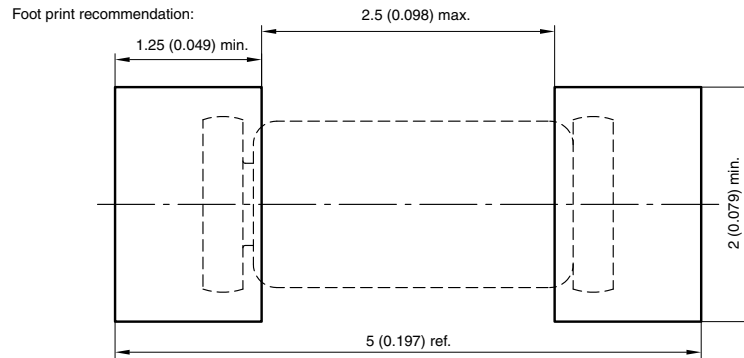
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Figure 4. Diode Capacitance vs. Reverse Voltage

Package Dimensions in millimeters (inches): QuadroMELF SOD-80



★ The gap between plug and glass can be either on cathode or anode side



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 96 12071



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