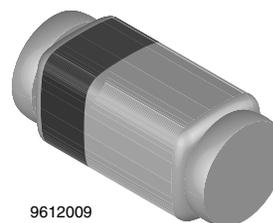


## RF PIN Diode - Single in QuadroMELF SOD-80

### Features

- Wide frequency range 10 MHz to 1 GHz
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC



9612009

### Applications

- Current controlled HF resistance in adjustable attenuators

### 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
BA980	BA980-GS18 or BA980-GS08	-	Tape and Reel (2.500 pcs)

### Absolute Maximum Ratings

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

Parameter	Test condition	Symbol	Value	Unit
Reverse voltage		$V_R$	30	V
Forward continuous current		$I_F$	50	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	$R_{thJA}$	500	K/W
Junction temperature		$T_j$	125	$^{\circ}\text{C}$
Storage temperature range		$T_{stg}$	- 55 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	$I_F = 20\text{ mA}$	$V_F$			1000	mV
Reverse current	$V_R = 30\text{ V}$	$I_R$			50	nA
Diode capacitance	$f = 100\text{ MHz}$ , $V_R = 0$	$C_D$			0.5	pF
Differential forward resistance	$f = 100\text{ MHz}$ , $I_F = 1.5\text{ mA}$	$r_f$	40		60	$\Omega$
Reverse impedance	$f = 100\text{ MHz}$ , $V_R = 0$	$z_r$	5			k $\Omega$
Minority carrier lifetime	$I_F = 10\text{ mA}$ , $I_R = 10\text{ mA}$	$\tau$		4		$\mu\text{s}$

### Typical Characteristics

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

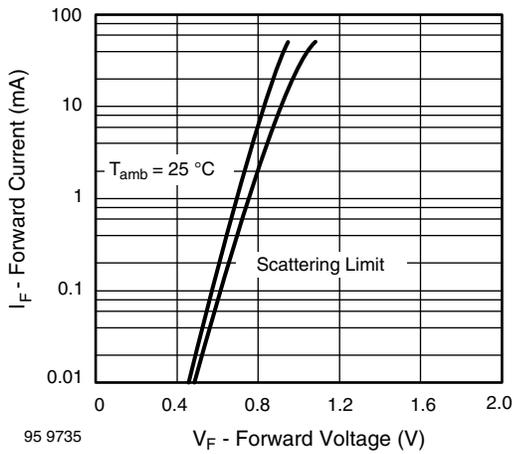
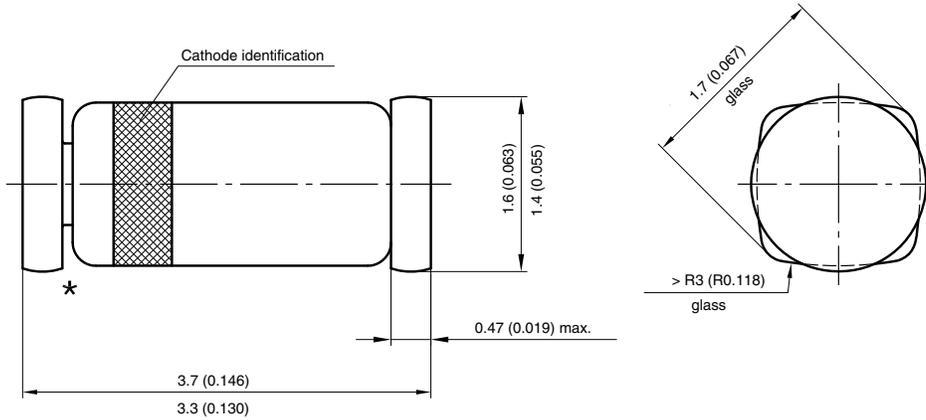


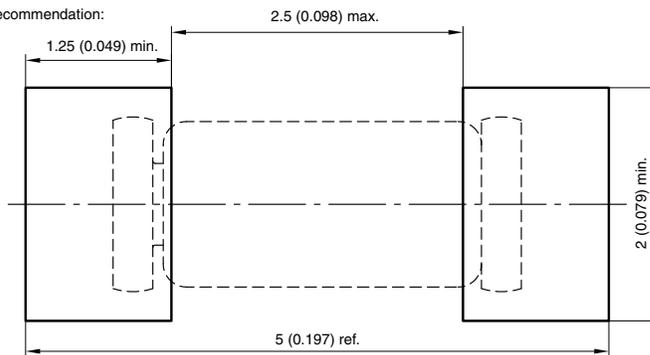
Figure 1. Forward Current vs. Forward Voltage

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



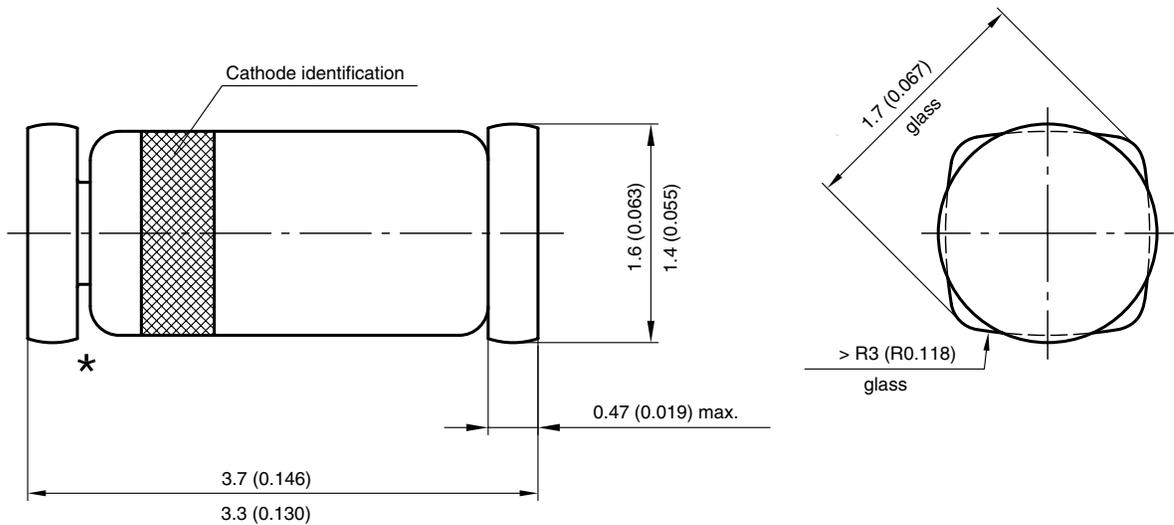
★ The gap between plug and glass can be either on cathode or anode side

Foot print recommendation:



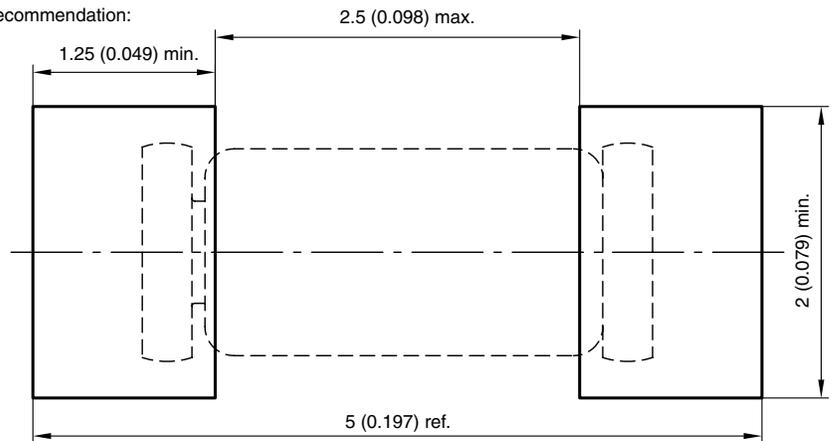
Created - Date: 03.November.2003  
 Rev. 11 - Date: 07.June.2006  
 Document no.:6.560-5006.01-4  
 96 12071

**PACKAGE DIMENSIONS** in millimeters (inches)



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

Foot print recommendation:



Created - Date: 03.November.2003  
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 96 12071



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