

## **Vishay Semiconductors**

# **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
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  COMPLIANT

# 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 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit	
Reverse voltage		V <sub>R</sub>	30	V	
Forward continuous current		١ <sub>F</sub>	50	mA	

#### **Thermal Characteristics**

T<sub>amb</sub> = 25 °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 <sub>thJA</sub>	500	K/W
Junction temperature		Tj	125	°C
Storage temperature range		T <sub>stg</sub>	- 55 to + 150	°C

#### **Electrical Characteristics**

T<sub>amb</sub> = 25 °C, unless otherwise specified

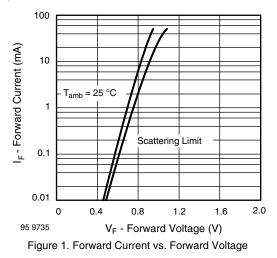
Parameter	Test condition	Symbol	Min	Тур.	Max	Unit
Forward voltage	I <sub>F</sub> = 20 mA	V <sub>F</sub>			1000	mV
Reverse current	V <sub>R</sub> = 30 V	I <sub>R</sub>			50	nA
Diode capacitance	f = 100 MHz, V <sub>R</sub> = 0	CD			0.5	pF
Differential forward resistance	f = 100 MHz, I <sub>F</sub> = 1.5 mA	r <sub>f</sub>	40		60	Ω
Reverse impedance	f = 100 MHz, V <sub>R</sub> = 0	z <sub>r</sub>	5			kΩ
Minority carrier lifetime	I <sub>F</sub> = 10 mA, I <sub>R</sub> = 10 mA	τ		4		μs

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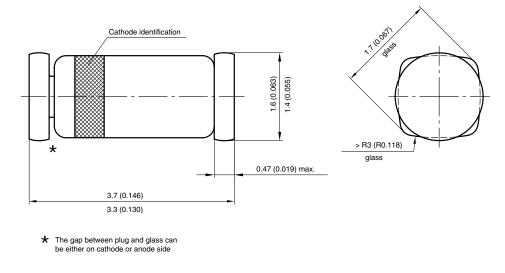


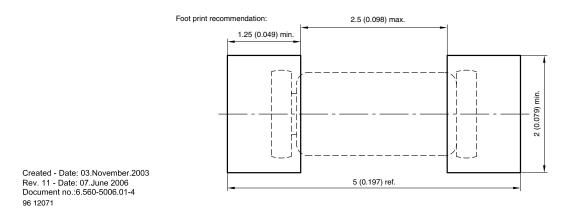
# **Typical Characteristics**

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



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







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