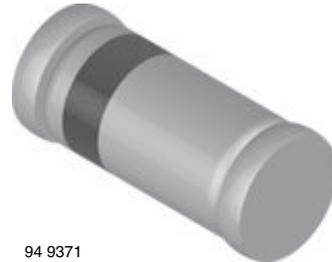


Small Signal Switching Diode

Features

- Silicon planar diode
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC


RoHS
COMPLIANT


94 9371

Applications

- General purpose

Mechanical Data

Case: MiniMELF SOD-80

Weight: approx. 31 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
BA604	BA604-GS18 or BA604-GS08	-	Tape and Reel

Absolute Maximum Ratings

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

Parameter	Test condition	Symbol	Value	Unit
Peak reverse voltage, non repetitive		V_{RSM}	80	V
Reverse voltage		V_R	50	V
Peak forward surge current	$t_p = 1\text{ }\mu\text{s}$	I_{FSM}	2	A
Repetitive peak forward current		I_{FRM}	450	mA
Forward continuous current		I_F	200	mA
Power dissipation		P_V	500	mW

Thermal Characteristics

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

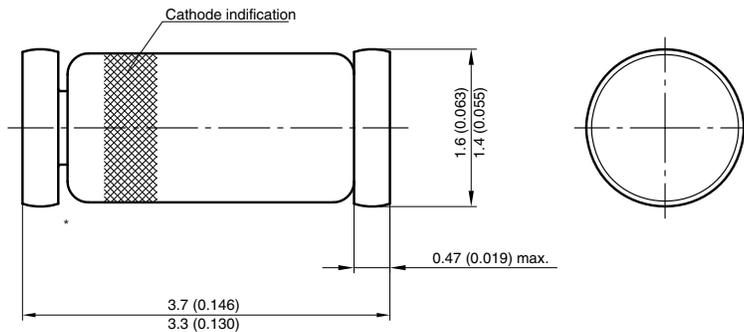
Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air	On PC board 50 mm x 50 mm x 1.6 mm	R_{thJA}	500	K/W
Junction lead	$T_L = \text{constant}$	R_{thJL}	350	K/W
Junction temperature		T_j	175	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	- 55 to + 175	$^{\circ}\text{C}$

Electrical Characteristics

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

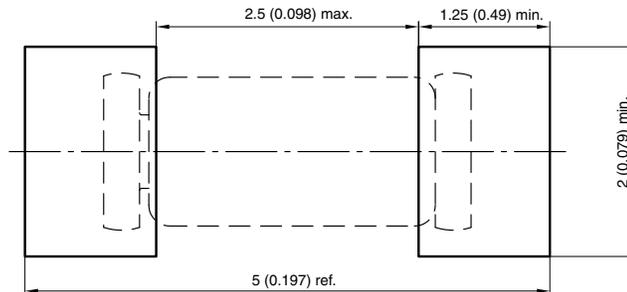
Parameter	Test condition	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F = 50\text{ mA}$	V_F			1100	mV
Reverse current	$V_R = 50\text{ V}$	I_R			1	μA
	$V_R = 20\text{ V}$	I_R			50	nA
	$V_R = 20\text{ V}, T_j = 150\text{ }^{\circ}\text{C}$	I_R			50	μA
Breakdown voltage	$I_R = 100\text{ }\mu\text{A}$	$V_{(BR)}$	80			V
Reverse recovery time	$I_F = 10\text{ mA}, I_R = 10\text{ mA},$ $i_R = 1\text{ mA}$	t_{rr}			20	ns
Diode capacitance	$V_R = 0, f = 1\text{ MHz}$	C_D			4	pF

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



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

Foot print recommendation:



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 Rev. 8 - Date: 07.June.2006
 96 12070



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