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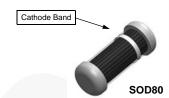
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**April 2013** 

# 1N457A / FDLL457A Small Signal Diode



COLOR BAND MARKING
DEVICE 1ST BAND
FDLL457A WHITE

## **Absolute Maximum Ratings**(1)

Stresses exceeding the absolute maximum ratings may damage the device. The device may not function or be operable above the recommended operating conditions and stressing the parts to these levels is not recommended. In addition, extended exposure to stresses above the recommended operating conditions may affect device reliability. The absolute maximum ratings are stress ratings only. Values are at  $T_A = 25^{\circ}\text{C}$  unless otherwise noted.

Symbol	Parameter	Value	Units	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	70	V	
I <sub>F(AV)</sub>	Average Rectified Forward Current		200	mA
I <sub>FSM</sub>	Non-repetitive Peak Forward Current	Pulse Width = 1.0 s	1.0	Α
	Non-repetitive Feak Forward Current	Pulse Width = 1.0 μs	4.0	Α
T <sub>STG</sub>	Storage Temperature Range	-65 to +200	°C	
T <sub>J</sub>	Operating Junction Temperature	175	°C	

#### Note:

1. These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Measured on 8.3ms single half-sine wave or equivalent square wave. Duty cycle = 4 pulses per minute maximum.

#### **Thermal Characteristics**

Symbol	Parameter	Value	Units
$P_{D}$	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	350	°C

#### **Electrical Characteristics**

Values are at T<sub>A</sub> = 25°C unless otherwise noted.

Symbol	Parameter	Conditions	Min.	Max.	Units
V <sub>R</sub>	Breakdown Voltage	I <sub>R</sub> = 100 μA	85		V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 10 mA		1.0	V
		I <sub>F</sub> = 100 mA		1.0	V
I <sub>R</sub>	Reverse Leakage	V <sub>R</sub> = 60 V		25	nA
		V <sub>R</sub> = 60 V, T <sub>A</sub> = 150°C		5.0	μΑ
C <sub>T</sub>	Total Capacitance	$V_R = 0$ , $f = 1.0 \text{ MHz}$		6.0	pF

1

## **Physical Dimensions**

## **SOD-80**

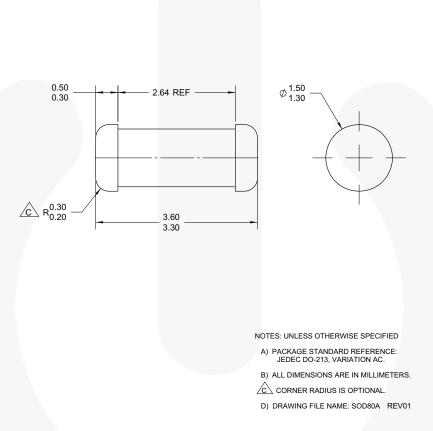


Figure 1. 2-TERMINAL, SOD-80, JEDEC DO-213AC, MINI-MELF

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Preliminary	First Production	Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.		
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