

High Conductance, Low Leakage Diode

FDLL3595

Description

A general purpose diode that couples high forward conductance fast switching speed and high blocking voltages in a glass leadless LL-34 surface mount package. Placement of the expansion gap has no relationship to the location of the cathode terminal which is indicated by the first color band.

Features

• This is a Pb-Free and Halide Free Device

ABSOLUTE MAXIMUM RATINGS

(Values are at T_A = 25°C unless otherwise noted.)

Symbol	Parameter		Value	Unit
W _{IV}	Working Inverse Voltage		125	V
Io	Average Rectified Forward Current		200	mA
I _F	DC Forward Current		500	mA
i _F	Recurrent Peak Forward Current		600	mA
I _{FSM}	Non-Repetitive Peak Forward	Pulse Width = 1.0 s	1.0	Α
	Current	Pulse Width = 1.0 μs	4.0	
T _{STG}	Storage Temperature Range		-65 to +200	°C
TJ	Operating Junction Temperature		-65 to +200	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

THERMAL CHARACTERISTICS

Symbol	Parameter	Value	Unit
P_{D}	Power Dissipation	500	mW
	Linear Derating Factor from $T_A = 25^{\circ}C$	3.33	mW/°C
$R_{ hetaJA}$	Thermal Resistance, Junction to Ambient	350	°C/W



MiniMELF/SOD-80 CASE 100AD

MARKING DIAGRAM



ORDERING INFORMATION

Device	Package	Shipping [†]
FDLL3595	MiniMELF/SOD-80 (Pb-Free/Halide Free)	2500 / Tape & Reel

[†]For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, BRD8011/D.

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ELECTRICAL CHARACTERISTICS (Values are at T_A = 25°C unless otherwise noted.)

Symbol	Parameter	Test Conditions	Min	Max	Unit
V _R	Breakdown Voltage	I _R = 100 μA	150	_	V
V _F	Forward Voltage	I _F = 1.0 mA	520	680	mV
		I _F = 5.0 mA	600	750	
		I _F = 10 mA	650	800	
		I _F = 50 mA	750	880	
		I _F = 100 mA	790	920	
		I _F = 200 mA	0.83	1.0	V
I _R	Reverse Leakage	V _R = 125 V	_	1.0	nA
		V _R = 30 V, T _A = 125°C	-	300	nA
		V _R = 125 V, T _A = 125°C	-	500	nA
		V _R = 180 V, T _A = 150°C	-	3.0	μΑ
C _T	Total Capacitance	V _R = 0, f = 1.0 MHz	-	8.0	pF
t _{rr}	Reverse Recovery Time	I_F = 10 mA V_R = 3.5 V R_L = 1.0 k Ω	-	3.0	μs

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

TYPICAL CHARACTERISTICS

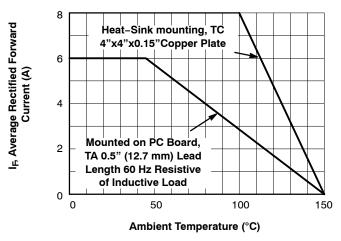


Figure 1. Forward Current Derating Curve

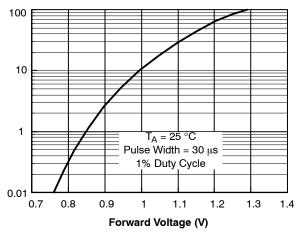
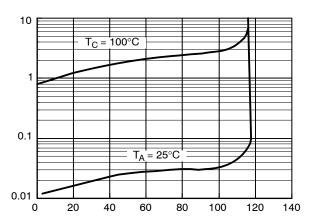


Figure 2. Forward Characteristics



Percent Of Rated Peak Reverse Voltage (%)

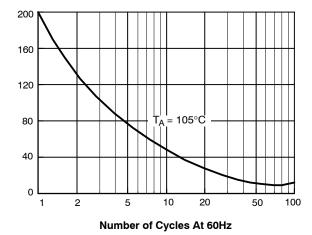
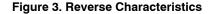


Figure 4. Non-Repetitive Surge Current



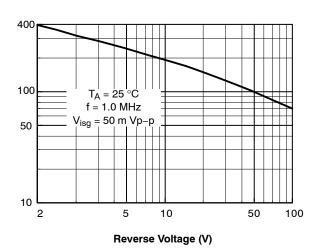
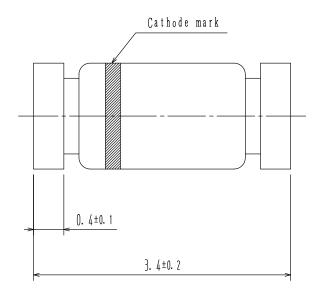


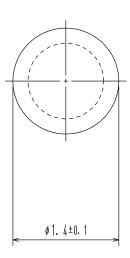
Figure 5. Junction Capacitance



MiniMELF / SOD-80 CASE 100AD ISSUE O

DATE 30 APR 2012





NOTES: UNLESS OTHERWISE SPECIFIED

- A) PACKAGE STANDARD REFERENCE: JEDEC DO-213, VARIATION AC.
- B) ALL DIMENSIONS ARE IN MILLIMETERS.
- C CORNER RADIUS IS OPTIONAL.
- D) DRAWING FILE NAME: SOD80A REV01

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