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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Small Signal Schottky Diode



FEATURES

- Integrated protection ring against static discharge
- Low capacitance
- Low leakage current
- Low forward voltage drop
- AEC-Q101 qualified
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

MECHANICAL DATA

Case: MiniMELF SOD-80

Weight: approx. 31 mg

Cathode band color: black

Packaging codes/options:

GS18/10K per 13" reel (8 mm tape), 10K/box

GS08/2.5K per 7" reel (8 mm tape), 12.5K/box

APPLICATIONS

- HF-detector
- Protection circuit
- Small battery charger
- AC-DC/DC-DC converters

PARTS TABLE

PART	TYPE DIFFERENTIATION	ORDERING CODE	INTERNAL CONSTRUCTION	REMARKS
LL103A	$V_R = 40\text{ V}$	LL103A-GS08 or LL103A-GS18	Single diode	Tape and reel
LL103B	$V_R = 30\text{ V}$	LL103B-GS08 or LL103B-GS18	Single diode	Tape and reel
LL103C	$V_R = 20\text{ V}$	LL103C-GS08 or LL103C-GS18	Single diode	Tape and reel

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^\circ\text{C}$, unless otherwise specified)

PARAMETER	TEST CONDITION	PART	SYMBOL	VALUE	UNIT
Reverse voltage		LL103A	V_R	40	V
		LL103B	V_R	30	V
		LL103C	V_R	20	V
Forward continuous current			I_{FAV}	200	mA
Peak forward surge current	$t_p = 300\text{ }\mu\text{s}$, square pulse		I_{FSM}	15	A
Power dissipation			P_{tot}	400	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}	250	K/W
Junction temperature		T_j	125	$^\circ\text{C}$
Storage temperature range		T_{stg}	- 65 to + 150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse breakdown voltage	I _R = 50 μA	LL103A	V _(BR)	40			V
		LL103B	V _(BR)	30			V
		LL103C	V _(BR)	20			V
Leakage current	V _R = 30 V	LL103A	I _R			5	μA
	V _R = 20 V	LL103B	I _R			5	μA
	V _R = 10 V	LL103C	I _R			5	μA
Forward voltage drop	I _F = 20 mA		V _F			370	mV
	I _F = 200 mA		V _F			600	mV
Diode capacitance	V _R = 0 V, f = 1 MHz		C _D		50		pF
Reverse recovery time	I _F = I _R = 50 mA to 200 mA, recover to 0.1 I _R		t _{rr}		10		ns

TYPICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

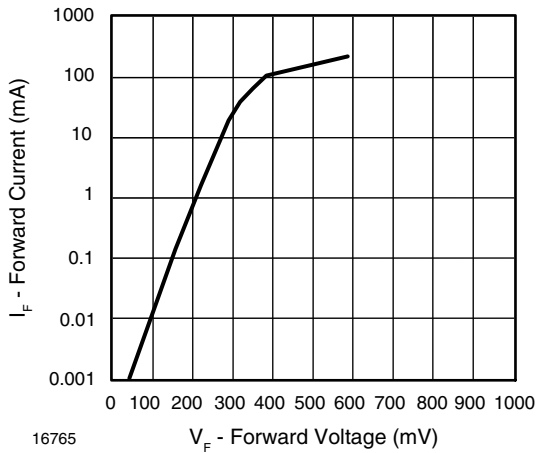


Fig. 1 - Forward Current vs. Forward Voltage

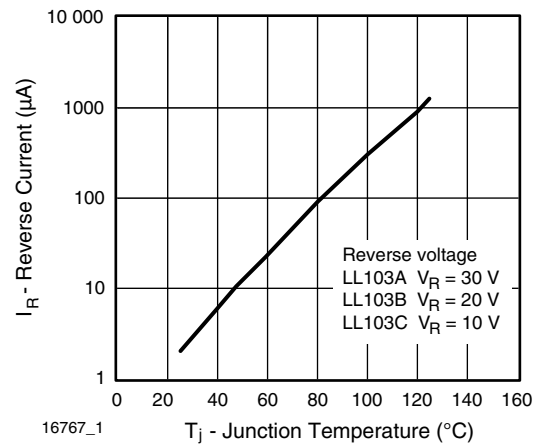


Fig. 3 - Reverse Current vs. Junction Temperature

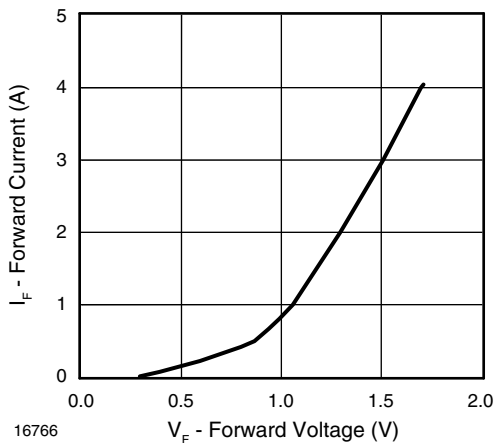


Fig. 2 - Forward Current vs. Forward Voltage

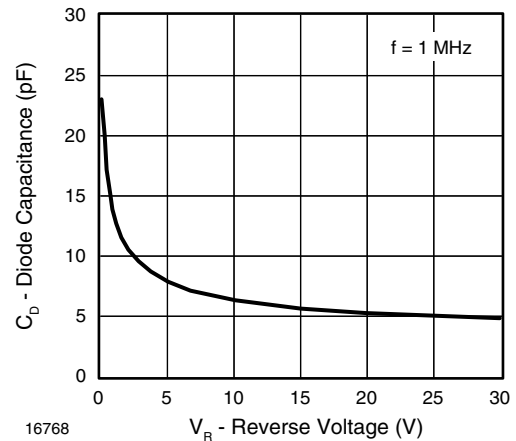


Fig. 4 - Diode Capacitance vs. Reverse Voltage

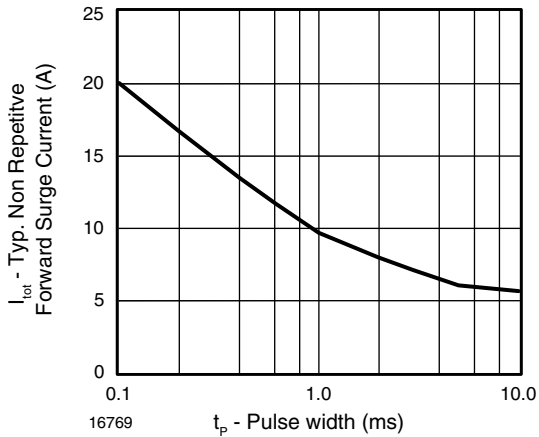
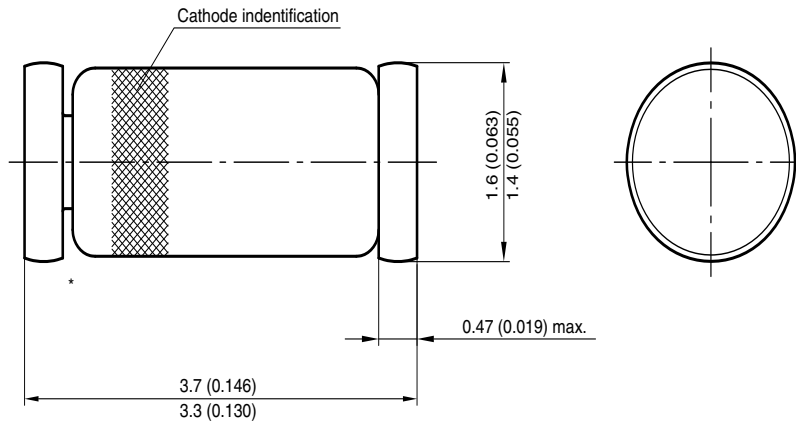
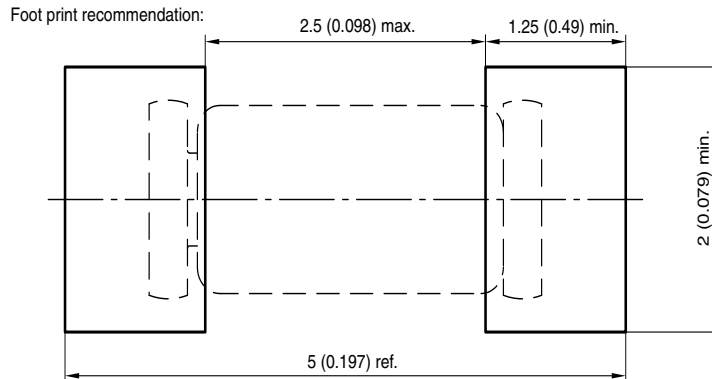


Fig. 5 - Typical Non-Repetitive Forward Surge Current vs. Pulse Width

PACKAGE DIMENSIONS in millimeters (inches): **MiniMELF SOD-80**



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



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