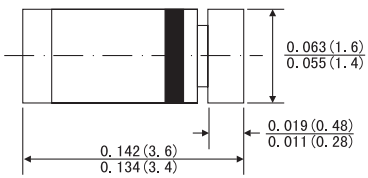
FEATURES

- For general purpose applications
- The LL101 series is a Metal-on-silicon junction Schottky barrier device which is protected by a PN junction guard ring. The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing, and coupling diodes for fast switching and low logic level applications
- These diodes are also available in the DO-35 case with the type designation SD101A to SD101C ,in the SOD-123 case type with the type designation SD101AW to SD101CW and in the SOD-323 case type with the type designation SD101AWS to SD101CWS,in the Micro-MELF case with type designation MCL101 to MCL103

Mini-MELF



Dimensions in inches and (millimeters)

MECHANICAL DATA

- *Case*: Mini-MELF glass case(SOD-80)
- *Weight*: Approx. 0.05 gram

ABSOLUTE RATINGS(LIMITING VALUES)

		Symbols	Value	Units
Peak Reverse Voltage	*LL101A*	V_{RRM}	60	V
	LL101B	V_{RRM}	50	V
	LL101C	V_{RRM}	40	
Power Dissipation (infinite Heat Sink)		P_{tot}	400 [1]	mW
Maximum Single cycle surge 10μs square wave		I_{FSM}	2.0	A
Junction temperature		T_J	125	℃
Storage Temperature Range		T_{STG}	-55 to+150	℃
1) Valid provided that electrodes are kept at ambient temperature				

ELECTRICAL CHARACTERISTICS

(Ratings at 25˚C ambient temperature unless otherwise specified)

		Symbols	Min.	Typ.	Max.	Unis
Reverse breakover voltage at I_R=10μA	*LL101A*	VRRM	60			V
	LL101B	VRRM	50			V
	LL101C	VRRM	40			V
Leakage current at V_R=50V	*LL101A*	I_R			200	nA
V_R=40V	*LL101B*	I_R			200	nA
V_R=30V	*LL101C*	I_R			200	nA
Forward voltage drop at I_F=1mA	*LL101A*	V_F			0.41	V
	LL101B	V_F			0.4	V
	LL101C	V_F			0.39	V
I_F=15mA	*LL101A*	V_F			1	V
	LL101B	V_F			0.95	V
	LL101C	V_F			0.9	V
Junction Capacitance at V_R=0V ,f=1MHz	*LL101A*	C_J			2.0	pF
	LL101B	C_J			2.1	pF
	LL101C	C_J			2.2	pF
Reverse Recovery time at I_F=I_R=5mA,recover to 0.1 I_R		t_{rr}			1	ns

RATINGS AND CHARACTERISTIC CURVES LL101A THRU LL101C

Figure 1. Typical variation of forward. current vs.fwd. Voltage for primary conduction through the schottky barrier

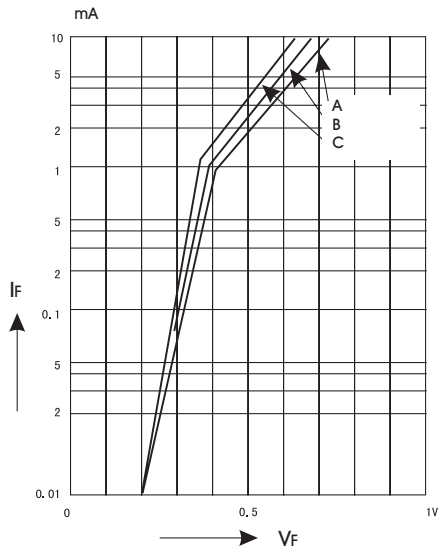


Figure 2. Typical forward conduction curve of combination Schottky barrier and PN junction guard ring

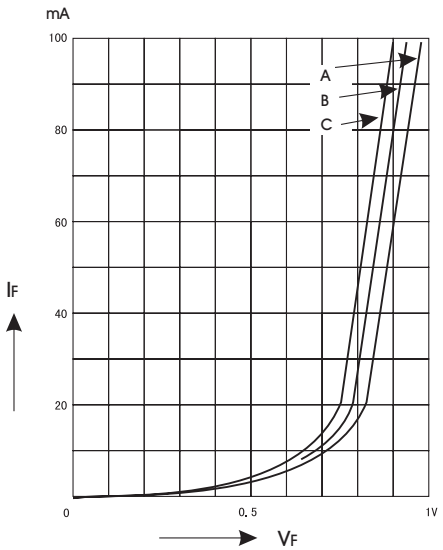


Figure 3. Typical variation of reverse current at versus temperature

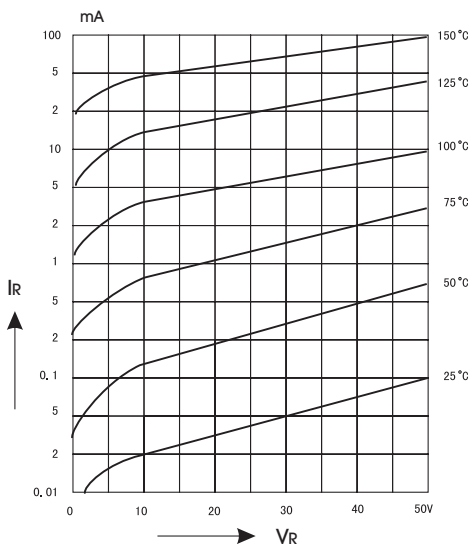
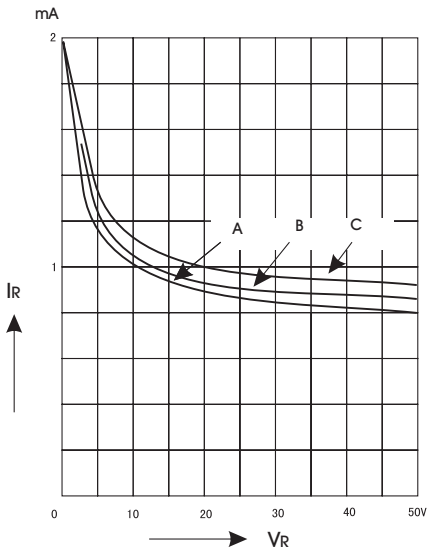


Figure 4. Typical capacitance curve as a function of reverse voltage



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