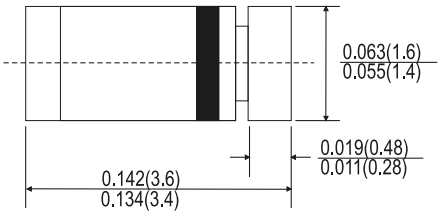
LL101A THUR LL101C

SMALL SIGNAL SCHOTTKY DIODES

MINI MELF / SOD-80 / DO-213AA

FEATURES:

- Silicon epitaxial planar diode
- For general purpose applications
- Low forward voltage drop



MECHANICAL DATA

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

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.
Single phase, half sine wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20 %.

Characteristic	Symbol	LL101A	LL101B	LL101C	Units
Peak reverse voltage	V_{RRM}	60	50	40	Volts
Power Dissipation (infinite Heat Sink) (NOTE 1)	Ptot	400			mW
Maximum Single surge 10uS square wave	I_{FSM}	2.0			Amps
Maximum Reverse breakover voltage at I_R = 10u A	V_R	60	50	40	Volts
Maximum Leakage current (NOTE 3) VR=50V VR=40V VR=40V	I_R	0.2	0.2	0.2	u A
Maximum instantaneous forward voltage drop per leg at IF=1mA IF=15mA	V_F	0.41 1.0	0.40 0.95	0.39 0.90	Volts
Junction Capacitance at V_R = 0 V, f=1MHZ	C_J	2.0	2.1	2.2	P_F
Maximum Reverse recovery time (NOTE 2)	TRR	1			ns
Operating temperature range	T_J	125			℃
Storage temperature range	Tstg	-55 to+150			℃

NOTES:
(1) Valid provided that electrodes are kept at ambient temperature
(2)Reverse recovery condition I_F =0.005A , I_R =0.005A ,,Recover to 0.1 I_R
(3)Reverse recovery condition : LL101A at V_R=50V,LL101B at V_R=40V,LL101C at V_R=30V

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

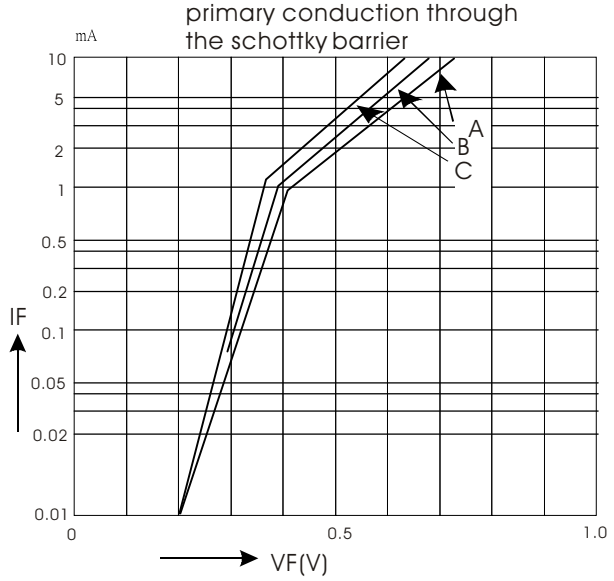


Figure-2. Typical forward Conduction curve of combination Schottky barrier and PN junction guardring

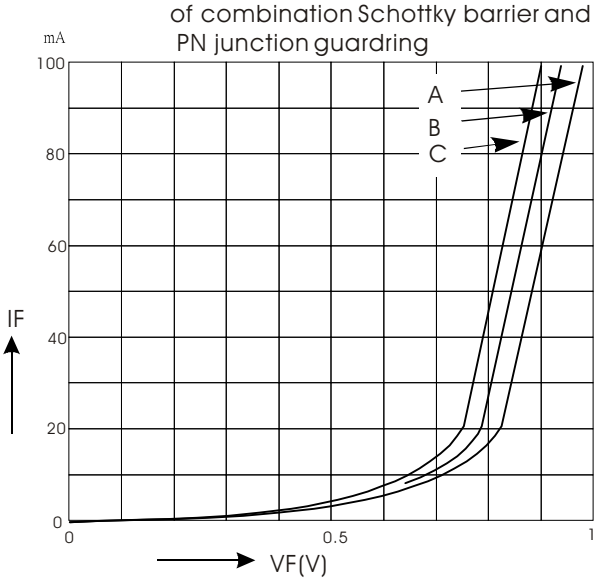


Figure-3. Typical variation of reverse current at versus temperature

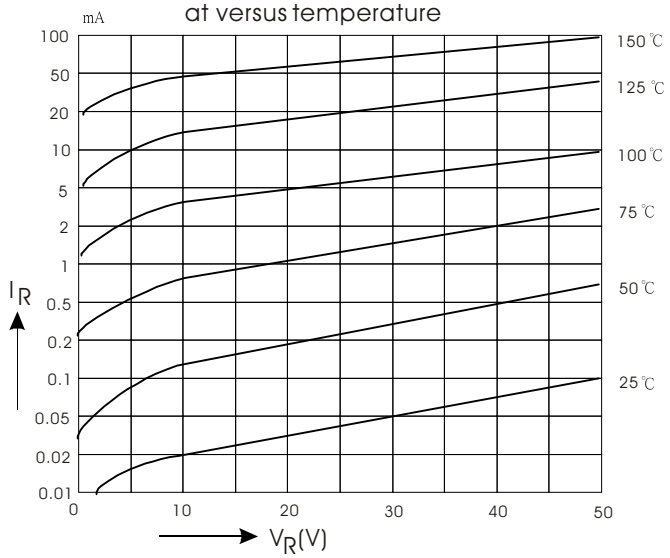


Figure-4. Typical capacitance curve as a function of reverse voltage