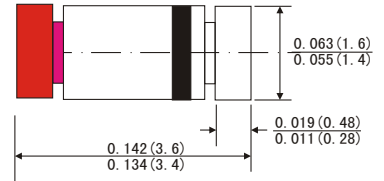


FEATURES

- For general purpose applications
- The LL103 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. Other applications are click suppressions, efficient full wave bridges in telephone subsets, and blocking diodes in rechargeable low voltage battery systems.
- These diodes are also available in the DO-35 case with the type designation SD103A to SD103C.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MiniMELF



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: MiniMELF glass case(SOD-80)
- Polarity: Color band denotes cathode end
- Weight: Approx. 0.05 gram

ABSOLUTE RATINGS(LIMITING VALUES)

	Symbols	Value	Units
Peak Reverse Voltage	LL103A LL103B LL103C	V _{RRM} 30 V _{RRM} 20	V
Power Dissipation (infinite Heat Sink)	P _{tot}	400 ¹⁾	mW
Maximum Single cycle surge 60Hz sine wave	I _{FSM}	15	A
Junction temperature	T _J	125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

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.	Units
Leakage current at V _R =30V V _R =20V V _R =10V	LL103A LL103B LL103C	I _R I _R I _R		5 5 5	μA μA μA
Forward voltage drop at I _F =20mA I _F =200mA	V _F V _F			0.37 0.6	V V
Junction Capacitance at V _R =0V, f=1MHz	C _J		50		pF
Reverse Recovery time at I _F =I _R =50mA, recover to 200mA recover to 0.1 I _R	t _{rr}		10		ns

RATINGS AND CHARACTERISTIC CURVES LL103A THRU LL103C

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

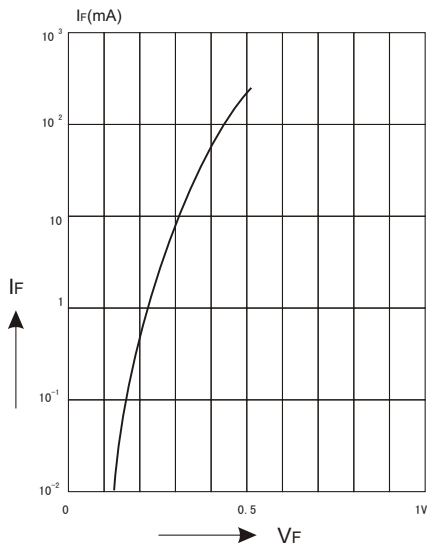


Figure 2. Typical high current forward conduction curve $t_p=300\text{ms}$, duty cycle=2%

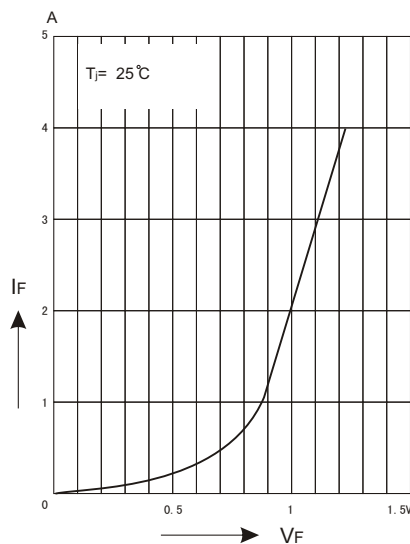


Figure 3. Typical non repetitive forward surge current versus pulse width

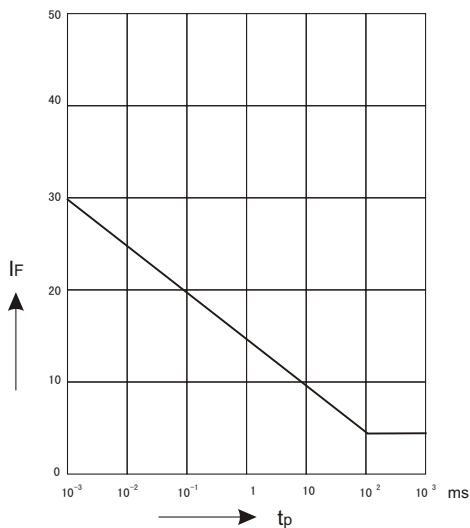
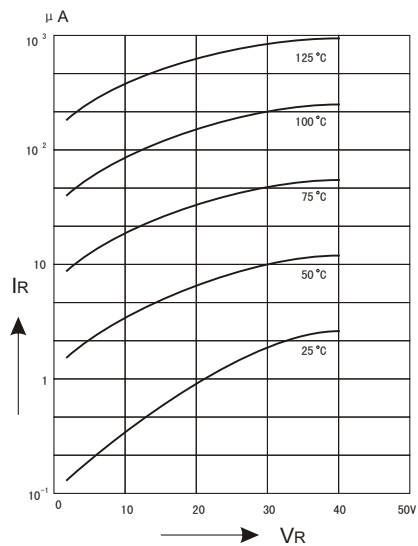


Figure 4. Typical variation of reverse current at various temperatures



RATINGS AND CHARACTERISTIC CURVES LL103A THRU LL103C

Figure 5. Blocking deration versus temperature at various average forward currents

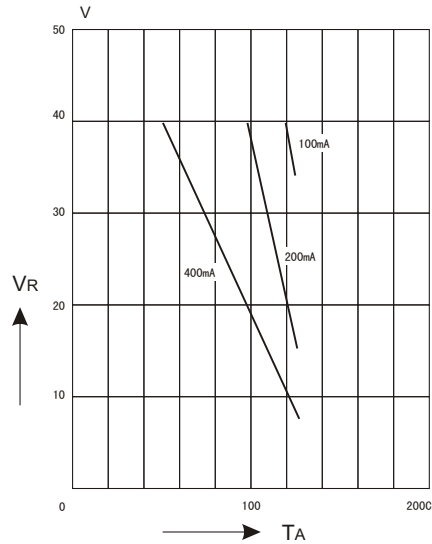


Figure 6. Typical capacitance versus reverse voltage

