SEMICONDUCTOR
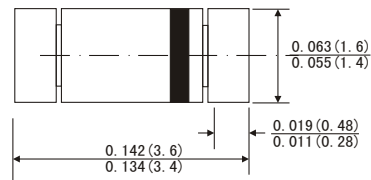
SMALL SIGNAL SCHOTTKY DIODES

FEATURES

· For general purpose applications

· This diode features very low turn-on voltage and high breakdown voltage .These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.

· This diode is also available in the DO-35 case with type designation BAT41.

· High temperature soldering guaranteed:260℃/10 seconds at terminals

· Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MiniMELF

0.063 (1.6)
0.055 (1.4)

0.019 (0.48)
0.011 (0.28)

0.142 (3.6)
0.134 (3.4)

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
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Forward Continuous Current at T_A=25˚C	I_F	100[1]	mA
Repetitive Peak Forward Current at t_p ＜1s, δ＜ 0.5, T_A=25˚C	I_{FRM}	350[1]	mA
Surge forward current at t_p ＜ 10ms , T_A=25˚C	I_{FSM}	750[1]	mA
Power Dissipation at T_A=65˚C	P_{tot}	400[1]	mW
Junction temperature	T_J	125	℃
Ambient Operating temperature Range	T_A	-65 to+125	℃
Storage Temperature Range	T_{STG}	-65 to+150	℃
1) Valid provided that electrodes are kept at ambient temperature			

ELECTRICAL CHARACTERISTICS

	Symbols	Min.	Typ.	Max.	Unis
Reverse breakdown voltage Tested with 100μA/300ms Pulses	$V_{(BR)R}$	100	110		V
Forward voltage Pulse Test t_p ＜ 300μs at I_F=1mA, at I_F=200mA	V_F V_F			0.45 1.00	V V
Leakage current Pulse Test t_p ＜ 300μs at V_R=50V at V_R=50V,T_J=100 ˚C	I_R I_R		0.40	100 20	nA μA
Junction Capacitance at V_R=1V ,f=1MHz	C_J		2		pF
Reverse recovery time Form I_F=10mA,I_R=10mA,I_R=1mA	trr			5	ns
Thermal resistance junction to ambient Air	$R_{θJA}$			300[1]	K/W
1) Valid provided that electrodes are kept at ambient temperature					

RATINGS AND CHARACTERISTIC CURVES LL41

Figure 1. Forward current versus forward voltage
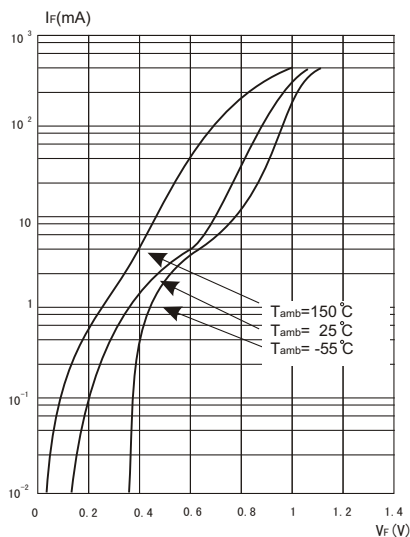at different temperatures(typical values)

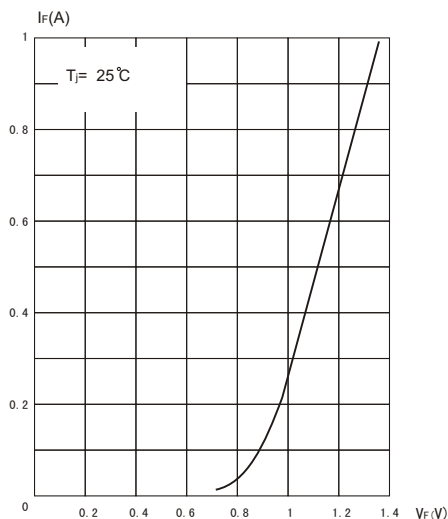Figure 2. Forward current versus forward voltage
(typical values)

Figure 3.Reverse current versus ambient
temperature