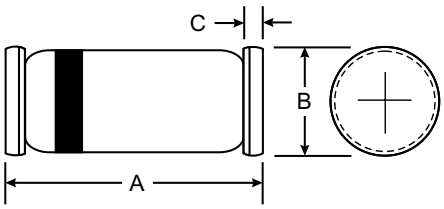
LL41

100mA Surface Mount Schottky Barrier Diode

Features

- For general purpose applications
- This diode features low turn-on voltage and high breakdown voltage
- This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- This diode is also available in the DO35 case with type designation BAT41
- Lead (Pb)-free component
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



SOD-80		
Dim	**Min**	**Max**
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

Mechanical Data

- **Case:**SOD-80 Glass case
- **Weight:** approx. 31 mg
- **Cathode Band Color:** black
- **Packaging Codes/Options:**
  GS18/10 k per 13" reel (8 mm tape), 10 k/box
  GS08/2.5 k per 7" reel (8 mm tape), 12.5 k/box

Maximum Ratings and Electrical Characteristics

@ T_A = 25°C unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Repetitive peak reverse voltage		V_{RRM}	100	V
Forward continuous current	T_{amb} = 25 °C	I_F	100[1)]	mA
Repetitive peak forward current	t_p < 1 s, δ < 0.5, T_{amb} = 25 °C	I_{FRM}	350[1)]	mA
Surge forward current	t_p = 10 ms, T_{amb} 25 °C	I_{FSM}	750[1)]	mA
Power dissipation	T_{amb} = 65 °C	P_{tot}	200[1)]	mW

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Reverse breakdown voltage[2)]	I_R = 100 µA	$V_{(BR)}$	100	110		V
Leakage current[2)]	V_R = 50 V, T_j = 25 °C	I_R			100	nA
	V_R = 50 V, T_j = 100 °C	I_R			20	µA
Forward voltage[2)]	I_F = 1 mA	V_F		400	450	mV
	I_F = 200 mA	V_F			1000	mV
Diode capacitance	V_R = 1 V, f = 1 MHz	C_D		2		pF

[1)] Valid provided that electrodes are kept at ambient temperature

[2)] Pulse test, t_p = 300 µs

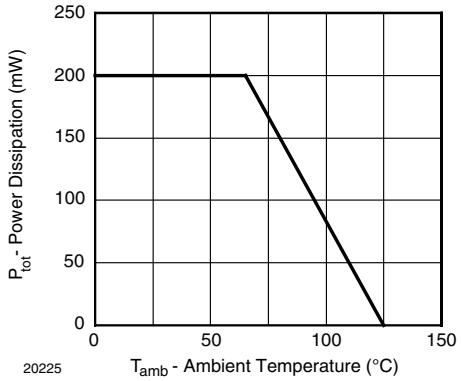


Figure 1. Admissible Power Dissipation vs. Ambient Temperature

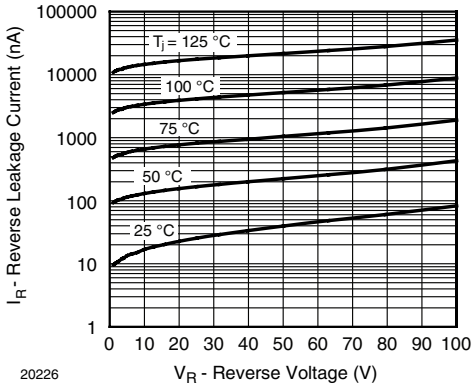


Figure 2. Typical Reverse Characteristics

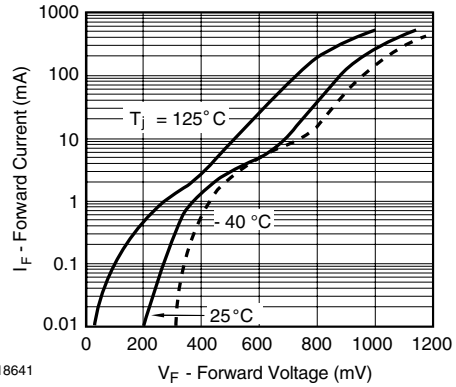


Figure 3. Typical Forward Characteristics

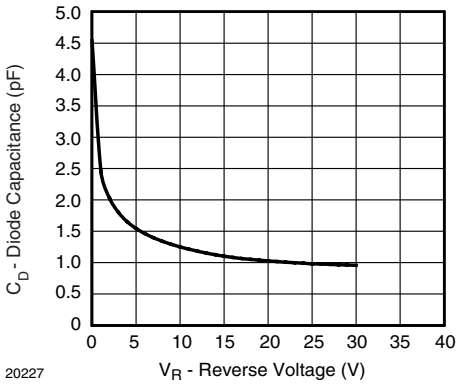


Figure 4. Typical Capacitance vs. Reverse Voltage