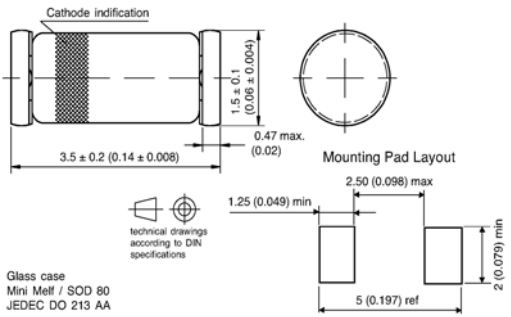
LL41

Small-Signal Diode
Schottky Diode

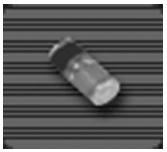
Features

- For general purpose applications.
- This diode features low turn-on voltage and high break-down 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 DO-35 case with type designation BAT41.



Mechanical Data

- Case: MiniMELF Glass Case (SOD-80)
- Weight: approx. 0.05g
- Cathode Band Color: Green



Maximum Ratings and Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	100	Volts
Forward continuous current at T_{amb}=25°C	I_F	100 (1)	mA
Repetitive peak forward current at t_p<1s, δ<0.5, T_{amb}=25°C	I_{FRM}	350 (1)	mA
Surge forward current at t_p=10ms, T_{amb}=25°C	I_{FSM}	750 (1)	mA
Power dissipation at T_{amb}=25°C	P_{tot}	400 (1)	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	300 (1)	°C/W
Junction temperature	T_j	125	°C
Ambient operating temperature range	T_{amb}	-65 to +125	°C
Storage temperature range	T_S	-65 to +150	°C

Electrical Characteristics

(T_J=25°C unless otherwise noted.)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	100uA/300uS pulses	100	110	-	Volts
Leakage current pulse test t_p=300us	I_R	V_R=50V, T_j=25°C V_R=50V, T_j=100°C	- -	- -	100 20	nA uA
Forward voltage pulse test t_p=300us	V_F	I_F=1mA I_F=200mA	- -	0.40 -	0.45 1.0	Volt
Capacitance	C_{tot}	V_R=1V, f=1MHz	-	2	-	pF
Reverse recovery time	t_{rr}	I_F=10mA, I_R=10mA, to I_R=1mA, R_L=100Ω	-	5	-	nS

Notes: 1. Valid provided that electrodes are kept at ambient temperature